Conv. Soppr. C. 1. 2616

Inc° 2616 C. 1.

A. C. Leonardus pisanus de Algorismo & Geometria
Est Abbatie florentin

B 73

Incipit lib' Abaci Compositus a Leonardo filio Bonacij Pisano. In Anno. M°.cc°.ij°

CRIPSISTis mihi dilectus magister Michael scotte sa me philosophie. Vt librū tuū quē oudū cōposuit nob' trāsmi teret: Unde uīe obsecūdas postulatiōi ipius subtilior pscrutan de indagine ad uerū honorē et aliorū mīror utilitatē coarcet. In cuius correctiōe quedam necessaria addidi et q̄dam sup flua resecaui. In quo plenā uīor doctrinā edidi iuxta modū intor q̄ modus in ipsa sīa a prestantiorē elegi. Et que arismetrica et geometria scientia ff connexe. Et suffragatione sibi ad inuicē non potest de uīo plena uīor doctrina nisi intersecentur geometrica quedā uel ad geometriā spectantia que hic tm iuxta modū uīj opantur q modus est sup tuus ex multis pbationib' et demonstrationib' que figuris geometricis fiūt. Uerū in alio libro quē de practica Geometrie composui ea q ad Geometriā p tinent et alia plura copiosius explicaui singula subiectis approbationibus geometricis demonstrando. Hanc ne liber magis [illegible]

[illegible] mmm. mmm. mmm. mmm. mmm. mmm.

quam ad ptica. Vñ q p eū huius sāe ptica bñ sapere uolentes oportet eos diutine usu et actu diuturno in ei' ptijs pstitisse q' sīa p ptica usa in habitū memoria. et intellect' ad eo accedentū manibz et figuris q' q' uno impulsu et audito in uno et eodē istanti ēca idē p' naturali sonēta et tacē cū fuit disapl's habitudinē secut' gdaū potūt ad pfectiōm huius facile peuenire. Et ut facilior pateat doctrina hui' libri p. xv. distinxi capla: ut q'q' d' his lectori uoluīt possit leuī inuenire. Porro si ibi opi reperiē insufficientia ul' defect' illud emendatiōi uīe subiecto.

Pater genitor mis apud' publice scriba in duana bugee p pisanis mercatoribz ad eaz dem tūc statuit' p' eet me in puericia mea adsc uenire faciēs in spectu utilitate et cōmoditate futura ibi me studio abbaci paliq' dies stare uolui et docen tibi admirabili magistro in arte p nouē figuras in dor introductis: scia artis in tm mi placuit et intellexi ad illā q' q'q' studebat' ei ea. ap' egyptū. syriā. greciā. sicilia. et pui cā cū suis modis. ad q' loca negotiatiōis tua pea pagauim et ibi tū studiū et disputa tiōis didici studiosius. sibi totū et algorismū atq' arte pictagore q' ei' respec tu modi in dor. Quē ap̄lectēs strictī ipm modū in dor et attēti studēs in eo exīpo sensu q̄dā addēs. et q̄dā ex subtilitatibz euclidis geometre artis apponēs sūma huius libri q' in tll'gibili potui in xv. capl's distincta redigere laboraui. fere ō q' ifra ēca pbatiōe ostēdēs. ut ea' pfecto pceptis mō hac sīaz appetētes instruāt et gēs latina ad' certo sic haberi absq' ulla mimme incidat. Siq'd forte mihi aut pl'ustro ul' necessario intimū. in dīcor indulgeatur. cui nemo sit q' minus careat: et in oib' iudicijs sit circūspect'. Explicit plog'. Incipiūt capitula.

De cognitiōe nouē figurarū yndor. et qualiter cū eis oīs nūs scribat' et q' nūi et qualiter re tineri debeat in manibz. et d' introductiōibz abbaci.

De multiplicatiōe integror nūor.

De additiōe ipor ad inuicē.

Leonardi Pisani Algorismi, Geometriæ
Inter Codices designatur num: 44.

De extractiõe mnoꝝ nũoꝝ ex mnoꝝ nũoꝝ.
De diuisione integraꝝ nũoꝝ per integros.
De multiplicatione integraꝝ nũoꝝ cũ ruptis atq; ruptoꝝ sic hic fiet.
De additiõe ac extractiõe ꝛ diuisiõe nũoꝝ integraꝝ cũ ruptis atq; partiũ nũoꝝ in singulis partib; reductione.
De emptiõe et venditiõe rerũ uenaliũ et similium.
De baractis rerũ uenaliũ ꝛ de emptiõe bolsonalie et quibusdaꝝ regulis similibus.
De societatib; fiũs inter consocios.
De consolamine monetaꝝ atq; eoꝝ regulis: q̃ ad cõsolamen pertinẽt.
De solutionib; multaꝝ positaꝝ q̃stionũ q̃ erraticas appellamus.
De regula elcataym quali p ipam fere oĩes erraticas q̃stiones soluãt.
De repientis radicib; quadratis et cubicis ex multiplicatiõe et diuisiõe seu extractiõe earũ inse ꝛ de tractatu binomioꝝ et residuoꝝ eoꝝ rac[illegible].
De triangulis numerosis geometrice pertinẽtib; et q̃stionib; aliebre et almuchabele. i capp̃ 3 capl̃.
Ipse nem figure numerorum he sunt.

9 8 7 6 5 4 3 2 1

Omnibus itaq; nouẽ figuris ꝛ cũ hoc signo o q̃ arabice zephyr appellat scribit quilibet nũs ut infra demõstratur. Nã nũs ẽ unitatũ plusa collectio sine cõgregatio unitatũ q plures in infinitũ ascendit gradus. Quoꝝ primꝰ exunitatibus q̃ sub ab uno usq; in decẽ constat. Secꝰ ex decem usq; in centũ fit. Tertius fit ex centẽ q̃ sub a centũ usq; in mille. Quartꝰ fit ex mille usq; in decẽ milia ꝛ sic seq̃ntiũ graduũ infinitũ quilibet ex decuplo sui antecedẽtis constat. Primus gradꝰ indeclinabiliter nũoꝝ incipit a deinde cetera. Secꝰ uo usus sinistra sequitur primũ. Tertius sim sequitur. Quartꝰ etiam. ꝛ quintus. quartũ. ꝛ semp sit usus sinistrã gradus graduz sequitur. Figura itaq; q̃ in primo reperit gradu se ipam repsentat hoc ẽ si in primo gradu suũ figura unitatis unũ repsentat. si binaria. duo. si ternaria. tria. ꝛ ita p ordinẽ q̃ sequitur. usq; si nouenaria. nouẽ figure quidẽ q̃ in secũdo gradu fuerint tot decenas repsentãt. quot in primo unitates hoc est si figura unitatis secm occupat gradus. denotat decẽ. si binaria uigiti. si ternaria trigita si nouenaria nouagita.

Figura nãq; q̃ in tertio fuerit gradu tot centenas denotat quot in secũdo decenas uel in primo unitates. ut si figura unitatis centũ. sit binaria ducenta. si ternaria. trecenta. et nouenaria nongenta. Ipa g̃ que fuerit in quarto gradu tot millenas quot in tertio centenas. aut in secundo decenas. uel in primo unitates denotat. ꝛ sic semp mutãdo graduz. nus decuplãdo ascendit. Et ne hoc q̃d dem est luculentius declaretur ipz cũ figuris ostendatur si figura septenaria fuerit in primo gradu. ꝛ ternaria in secũdo ãbe insimul 37 denotãt uel contra. figura ternaria in primo. ꝛ septenaria in secũdo 73 denotabit. Item si figura quaternaria fuerit in primo. ꝛ unitatis in secũdo sic 14 numerũ. xiiij. denotabit. uel si figura unitatis fuerit in primo. ꝛ quaternaria in secũdo sic 41 denotabit xli. Rursus in primo 72 ꝛ in secũdo factum 27 Contrarium enim fac 72 81 aut septuaginta cum octo no

lnūr. ponat in ꝑmo ḡdu 0. ⁊ ꝑ ipm ponat figurā septenariū sic 70. si quinquagenta. sequat zephyr figurā octonariū sic 80 hec itaq; dmōstrandē quelibz nūm adē usq; mātū dū duabz figīs sibi ponēs. Cū tm̄ uo acētū scribī usq; in mille. nec figura octonarii fuīt in ꝑmo. ⁊ quinarii in sedo. ⁊ octonarii in tio 178 cētū quinq; unitatis gnta octo dnotabit. ⁊ eccm iso si figa unitatis fuīt in ꝑmo. ⁊ quinarii in sedo ⁊ octonarii in tio 587 octingēta ⁊ quadragīta unū dnotabī. ut ecē. si figa octonarii fuīt in ꝑmo ⁊ unitatis in sedo. ⁊ quinarii in tio. dnotabī 718 Iterū si pmutatī figa quinarii fuīt in ꝑmo. octonarii in so. ⁊ unitatis in tio. dnotabī 184 Iterū si figa unitatis fuīt in ꝑmo. octonarii in sedo ⁊ quinarii in tio nouies dnotabī 481 tres uo unitates sic. 111 cētū undecim significāt. Nūc si quis quadragīta trīa scribe uoluīt in ꝑmo ⁊ in sedo gdu ponat zephyra. ⁊ in tio figuā quinarii h̄ m. 400 ⁊ sic cū duobz zephyris quelibet cētenariorū nūm scribē potīs. Et si cētenaria cū decenis siue unitatibz scribe uoluīs. ponas in ꝑmo gdu zephyr. in sedo decenas. ⁊ in tio cētenas quas uoluīs. Vbi ḡtī si in ꝑmo gdu fiat zephyr. ⁊ in sedo figa nouenarii. ⁊ in tio binarii. dnotabē 290 Si aūt absq; decenis cētenaria cū unitatibz scribe uoluīt. ponēs in sedo gdu. s. in loco decenarii zephyrū. ⁊ in ꝑmo nūm unitatū quē uoluīt. ⁊ in tio cētenariorū. ut si in ꝑmo fuīt figa nouenarii. ⁊ in sedo zephyr. ⁊ in tio binarii 209 ⁊ sic de sup dictis dmonstrationibz quelibet uoluīs nūs acētū usq; in mille scribes cū tribz figīs. Cum q̄ttuor nāq; a mille usq; in decē milia ut in sequēti cū figīs nūs sup notatis ostendē.

⁊.i.	⁊ⁱ⁊ⁱxviii.	⁊ⁱ⁊ⁱ⁊ⁱxxii.	⁊ⁱ⁊ⁱ⁊ⁱxx.	⁊ⁱ⁊ⁱ⁊ⁱ⁊ⁱvc.	⁊ⁱ⁊ⁱ⁊ⁱ	⁊ⁱcxi.	⁊ⁱccxxxviii.	⁊ⁱ⁊ⁱ⁊ⁱcccxxi.
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Et sic in reliqs nūs ē p̄cedēdū. Cū q̄nq; nāq; figīs sibī ō nūs mapiendo ad decē milia. usq; ad cētū milia. Cū sex uo a cētū milibz usq; in mille milia. ⁊ sic dmceps addendo figām figuris. nūl ḡdatim in decuplū ascēdat. Vñ si quis geīt q̄dā aliquē nūm mītudinē figāt. p mītudinē figā. quis legē ut intelligē nec q̄at. qualiē legē ⁊ intelligē ipm debeat ostendē p̄ceptualo.

Ē ꝑma itaq; figura. h̄ē de figura ꝑm gradus. dicat unum.

Ē sedā que ē in sedo gdu. dicat decem.

Ē tīa quo eīt in tio gdu. dicat cētū. ⁊ ad center eā in supiori parte

Ē quarta nāq; figa eiusdē nūs. dicat mille. ⁊ ad cēter eā in infiori pte.

Ē quinta uo dicat decem milia.

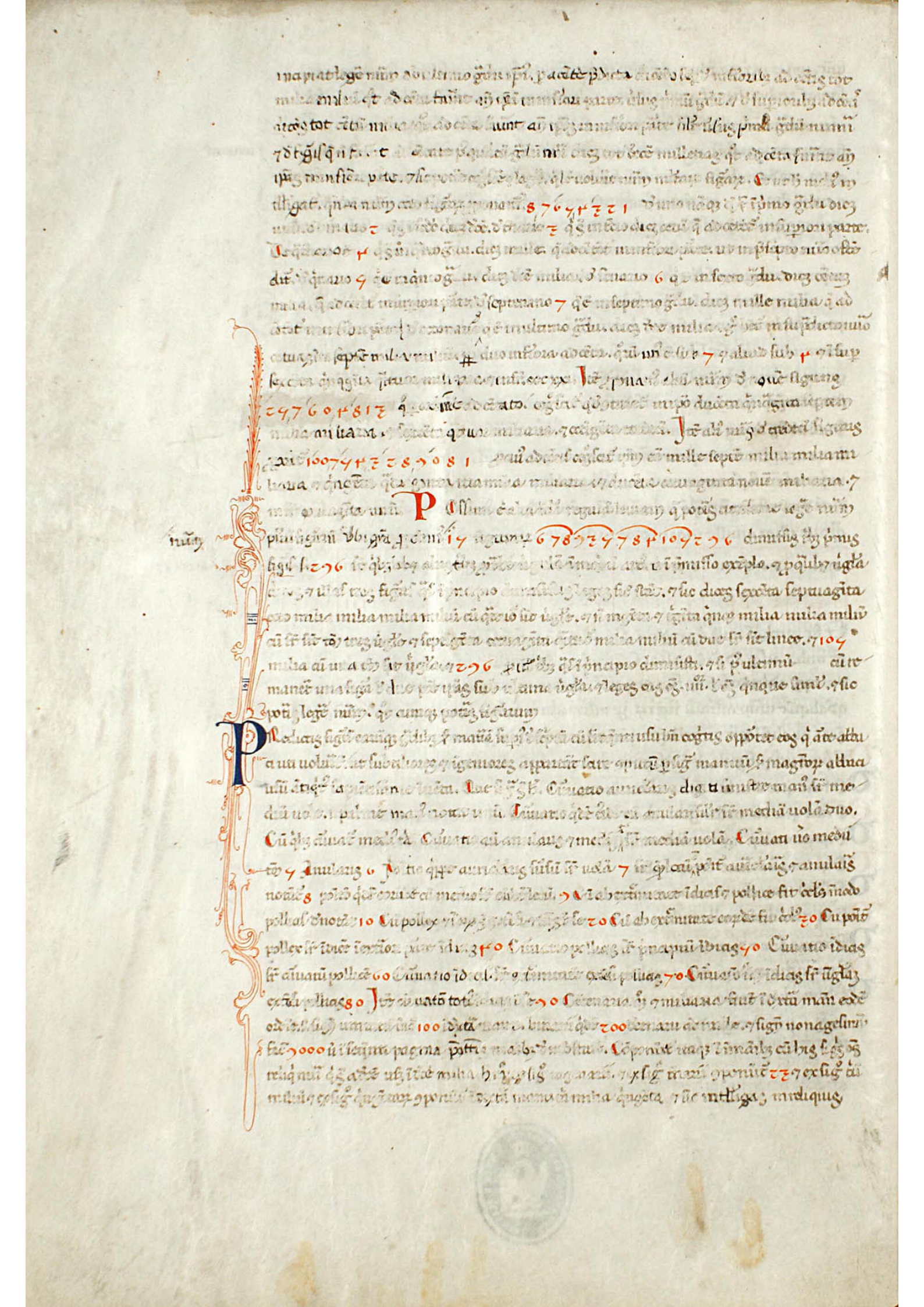
Ē sexta itaq; cētum milia. ⁊ ad center eā in supiori parte.

Ē septima dicat mille milia. et ad cēter eā rursū in infiori parte.

Ē octaua dicat decem milia milium.

Ē nona dicat cētū milia milium. ⁊ ad center eā in supiori parte.

Ē decima dicat mille milia milium. ⁊ ad cēter eā in infiori pte. ⁊ sic sēp plus tres nūs. s. p millenos. ⁊ dē millenos. ⁊ cētū millenos. ⁊ ad cētādo millenos in infiori pte. ⁊ cētū millenos in supiori usq; ad ultimū gdū nūs studiat ad cētare. Et mō



Introductiones in ac ditione et mulapuchatione numerorum

Janua binarii

2	et 2	fiunt 4
2	3	5
2	4	6
2	5	7
2	6	8
2	7	9
2	8	10
2	9	11
2	10	12

Janua ternarii.

3	et 3	fiunt 6
3	4	7
3	5	8
3	6	9
3	7	10
3	8	11
3	9	12
3	10	13

Janua quaternarii

4	et 4	fiunt 8
4	5	9
4	6	10
4	7	11
4	8	12
4	9	13
4	10	14

Janua quinarii

5	et 5	fiunt 10
5	6	11
5	7	12
5	8	13
5	9	14
5	10	15

Janua senarii

6	et 6	fiunt 12
6	7	13
6	8	14
6	9	15
6	10	16

Janua septenarii

7	7	14
7	8	15
7	9	16
7	10	17

8 et 8 fiunt 16

8	9	17
8	10	18

9 et 9 fiunt 18

9	10	19

10 et 10 fiunt 20

20 et 20 fiunt 40

20	30	70
20	40	60
20	50	70
20	60	80
20	70	90
20	80	100
20	90	110

30 et 30 fiunt 60

30	40	70
30	50	80
30	60	90
30	70	100
30	80	110
30	90	120

40 et 40 fiunt 80

40	50	90
40	60	100
40	70	110
40	80	120
40	90	130

50 et 50 fiunt 100

50	60	110
50	70	120
50	80	130
50	90	140

60 et 60 fiunt 120

60	70	130
60	80	140
60	90	150

70 et 70 fiunt 140

70	80	150
70	90	160

80 et 80 fiunt 160

80	90	170

et fiunt

90	90	180

Expaunt uiciones

Incipiunt multiplicationes

De binario

2	vicel 2	fiunt 4
2	3	6
2	4	8
2	5	10
2	6	12
2	7	14
2	8	16
2	9	18
2	10	20

De ternario

3	vicel 3	fiunt 9
3	4	12
3	5	15
3	6	18
3	7	21
3	8	24
3	9	27
3	10	30

De quaternario

4	vicel 4	fiunt 16
4	5	20
4	6	24
4	7	28
4	8	32
4	9	36
4	10	40

De quinario

5	vicel 5	fiunt 25
5	6	30
5	7	35
5	8	40
5	9	45
5	10	50

De senario

6	vicel 6	fiunt 36
6	7	42
6	8	48
6	9	54
6	10	60

De septenario

7	vicel 7	fiunt 49
7	8	56
7	9	63
7	10	70

De octonario

8	vicel 8	fiunt 64
8	9	72
8	10	80

De nouenario

9	vicel 9	fiunt 81
9	10	90

De decenario

10	vicel 10	fiunt 100
10	20	200

Expaunt multiplicationes

Capitul' magn' mtl' unc' & mlcones inmanib; addisc' sep utr' colligē
ut ad p'mā mā[n]ib; mactrato nib; & mlcac'ib; quor'libz nūor' expedior fiat.

Incipit capitulum sēm demultiplicatiōē integror' numerorum

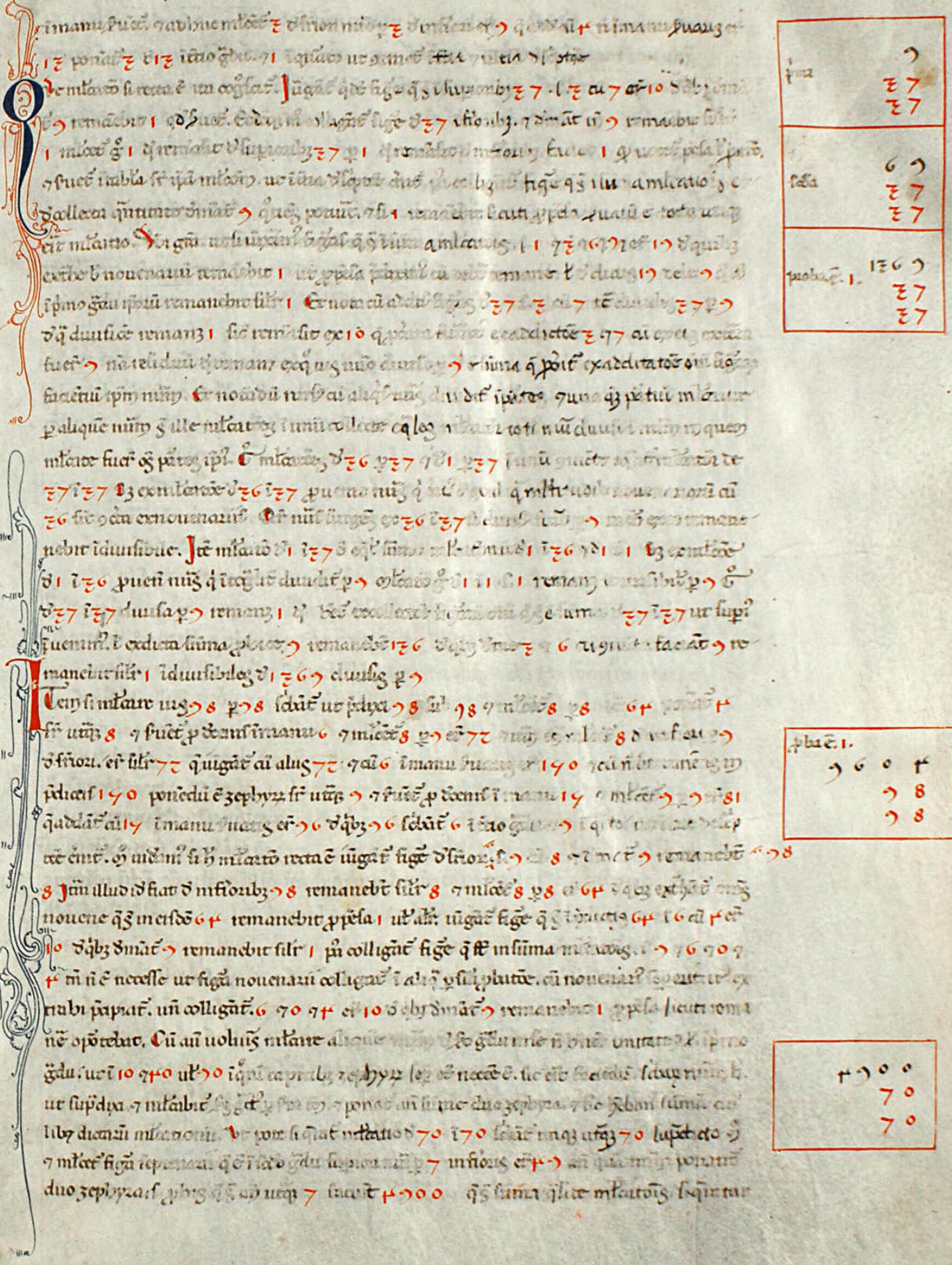
Omnis sup' d'mlcac'ōib; integrū nūer' i ecto p'tes dundim' ut dixim'.
unq; g'uq; eaq; mal' i alligāt'. Quar' p'ma p's, etc' d'mlcac' duar' figar'
& duar', q; una figē & p's. Sc'a d'mlcac' tr' figar' & trēs unq; duar'
figar' [illegible] c'a d'mlcac' q'tuor figar' & q'tuor figis.
Quīta d'mlcac' q'nq; figūr' i q'nq;. Sexta d'mlcac' nūer' si gd' p nūer' etc' gd'. hec duar' figar' p duar' ar
q; una & p's & hec eadē i manib; mlcat'. Septīa d'mlcac' tr' figata p trēs sibi q'libz
manib; [illegible] c'a d'mlcac' octōy nūer' alia modi. duas

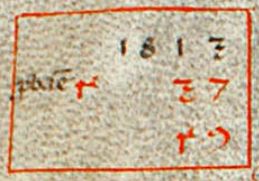
Incipit pars p'ma d'mlcac' duar' figar' octa

Primū sc'ī op' mlcon de q'libz p'mā p's. Incipit pars p'ma d'mlcac' duar' figar' octa
[illegible] 12 12 6 6 Quīq; nūy mlcare dicat'. q'n nūi se tuēc' mlcaīcq; sūt. ad hu
[illegible] 12 7 6 1 6 5 dnaq; nos p'mi nūeq; sedi gdus ut p'mā simus.
[illegible] ut q; sc'a i mēsp' mlcon' dcam. Cū aūt uq; mlcare aliquē nūy sedi gdus p
aliquē nūy & [illegible] sūb nūo. ita ut sūq; gd' sit
[illegible] & nūq; [illegible] sūb nūor. & unaq; mlcon a p'mo gdu
nūi i [illegible] 1 [illegible] gā p'mi gd' sūor. nūi i tabā p'scpt p'gaq; p'mi gdus
sub'tiōr. & sc'a [illegible] p'mā. addi nūer' p'scpt. & p'mā quāq; dcenā tenē
at i manu [illegible] unū d' [illegible] gā p'mi gd' sūor. nūi p figā sedi gd' p ultimā. s.
sub'tiōr. nūi & sc'a figa p'mā, d' [illegible] mlcē ultimā figā supior. & addit' i manu
aī suat' dcenā & [illegible] dcē. & teneat' i manu dcene. Jē mlcet
ultima lagē sūor. nūi p ultima sub'tiōr. & sc'a mlcare cuenit. aī suat' dcenā i
manu & addat' [illegible] & dcem & habebit' i quāto ponat'. & hebit mlcato
q'libz nūor [illegible] 1 & 1 cetā. Vbi gra. ut si q'ret' mlcom d' 12 i 12 sc'dū 12 bis ita
vola d' alba [illegible] & ut dicē. sicut i hac mā̄gine sc'pti enē p'mi gd' sub'tiōr.
nūi sub p'mo sūor. hec lagā [illegible] & so gdus sub'tiōr sub so sūor.
s. lagā unitat'. sub hac [illegible] & mlcē unaq; p unaq; & so gdus sūor nūi est 1 q; patit sr utriq;
unaq; ut i p'ma d' [illegible] Jē mlcet sūor 1 q; i so gdu sūor nūi est 1
q; ducē i manu. & [illegible] sub'tiōr. nūi p 1 sūor. est 1 q; addat aī duob; supi suat'.
est 1 q; patit sr p'mā [illegible] & fm gdū p p'ra ponta 1 & q; fecerāt p'mū gdū
ut i su d'scpt' d'scon [illegible] & d' sūor nūo. & unū d' sub'tiōr facet 1 q; sc'dū
ordinē gdū. [illegible] d'scpt' [illegible] & ostēdit. Et i hoc accidit mlcato
d' 12 inter q; s. 1 1 1

d'scpto		
p'ma		1
	1	2
	1	2
sc'a		1 1
	1	2
	1	2
ultima	1	1 1
	1	2
	1	2

Venū ut in sc'a dcam' est 7 p 7 mlcet d'mlcat' & 7 sub 7 ut supi d' 12 dixim'. ea
mlcet 7 p 7 et 1 ponat' unaq; [illegible] 7 ut i p'ma d'scpt' ostēdit. & q'tuor d'
dcenis & [illegible] 1 ducē 1 i manu. & [illegible] 7 & sūor nūi p 7 sub'tiōr. & 7 d' sūor
p 7 supior. & unaq; [illegible] et 1 6 qui [illegible] et 1 6 sc'dū ordinē
[illegible] 6 & [illegible] 6 sūor nūi 7 ut [illegible] & [illegible] dcenis & 1 6



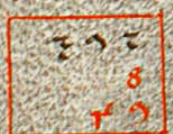


d z7 m ꝯ ſcdm̃ f ſub z7 ſ. manor nm̃ ſub minor. ⁊ ſi mlig gd' ſub ſili
gdu ut i hac mag ne ant̃. ⁊ mlcat 7 p ei 6z ponat z ſr 7 p dcm̃ ſuent
i manu 6 ⁊ mlcet 7 p f i cauc. ei z8 q addat ai 6 i manu ſuam. ei z f
Jt̃ mlcet ⁊ p z ei z7 q addat ai z f ei 61 ponat 1 ſr z ⁊ p dcm̃ ſuet i ma
nu 6 ⁊ mlcet z p f ei 1z q addat ai 6 ei 18 q pat p 1z ſupi poita. egdiem
p ſuma dicte mlcatoꝝ 181z ut h oſtenditur.

Et ſi mlcatio recta ē ita cogſcat. dumdat z7 p b ē addat figē d z7 ſ. z ai 7
ei 10 dqbz dmat ꝯ remanebit 1 q fuit ſili addat figē d f ꝯ. ſ f ai ꝯ ei 1z
dqbz dmat ꝯ remanebit f q mlcz ai 1 ſuo. ei f q fuit ꝑpenſa. ⁊ colligat
figē q ſ ſuma mlcatoꝝ. ſ. 178 71 7z ei 1z dqbz dmat ꝯ remanebit f ut o
portet ꝑpenſa remanere.

Preedit h mod' mlcandi ex hiſ q dixi ſupi dmio ipoſitog d unſo. ⁊ mlcatoꝝ alui
quo uſ nim. Nam mlcatio d z7 i f ꝯ eqſ collectoi mlcationũ d 7 i f ꝯ 7 d
z0 i f ꝯ 8z mlcatio d 7 i f ꝯ eqſ ꝯiuco mlcationũ d 7 i 7 7d 7 i f0 ⁊ mlca
tio nrſ d z0 i f ꝯ eqſ mlcoibz d z0 i ꝯ 7d z0 i f0 E mlcatio d z7 i f ꝯ eqtur
qtuor mlcatoibz q ſ 7 i ꝯ 77 i f0 7z0 i ꝯ 7z0 i f0 Cuc. nm̃. mlcatoꝝ accipio
ſ ſup p ordinẽ mlcatiũ pmũ 7 p ꝯ ⁊ poſtm̃ unumq ſr pmũ gdũ. q pm'
gd' quecuiq gdũ mlcat ipm gdũ ſuũ. ut ũnmate in ipo. Dcdo mlcatiũ 7 p f
tuo ꝯ p z ⁊ tuui mlcationũ acceptũ ſuma d q poſtm̃ unumq i ſo gdu. q
ai pmi gd' ſm mlcat. ſm gdũ ſuũ. Ecdi ſunt mlcate 7 p f0 ⁊ p z0 pea adul
timũ mlcatiũ z p f. ſ. ſm gdũ p ſm. Et ecipa mlcatõe addita ai dcem ſua
q poſtm̃ unumq ieio gdu. ⁊ dcenq q ſr fuer i quato. q h fuer mlcate z0 p
f0 q ſg gdi quecuiq mlcat ſm gdũ ſuũ p ipz quo mlcat. Sit ẽ gdus mũ
quecuiq gdũ mlcat tuũ gdũ ſuũ p ipm quo mlcat. Et quat ſua quanũ p ipz
quo mlcat. ⁊ quo ꝓmũ. ⁊ z. Sngſtim itaq do ē dice pmũ gdũ quecuiq mlcate
ipm ſuũ. aut ſuũ nm̃ ũnmate in ipo. Cũ mlcatõ figã p figam. ⁊ ex mlcatõe ñ
pcedat ulr Jt̃ mlcatio illa ſuũ ipm gdũ. ⁊ ai ex mlcatõe cadẽ pcedat nug
ſi gd' ut z0 ut z0 aut ꝑit ex ſo ⁊ o ut 1 ⁊ z8 tẽ ſuũ nm̃ ũnmate in ipo
gdu. quo pmi gd' mlcat. ⁊ ido ai mlcatiõ pmi gdũ p aliquo gdũ ponat
unumq illi mlcatoiq ſr ipm gdũ ⁊ dcenq ſuam ad ſequẽs gdũ. h ide illi
gat d mlcatõe reliquoꝝ gdnum. De mulp̃catõe cõm pluriũ ũi figure

Cum ſignat mlcatio unũ figẽ ꝫ duas. ut ꝫ plig. ſcdm̃ ipm ſola figa ſr figam
pmi gdus ipi mm. ai q ipam mlcare nolũt. ⁊ mlcet ipm ſolã ai pma ipi mm
⁊ ponat unumq ſr ipm ⁊ manu retineat decem. ⁊ mlcet eidẽ ſola figa p ſm
mlcatiõem ſuũ. ⁊ addat ai decem ſuas. ⁊ ponat ſemp unumq ⁊ decem ſuũ.
⁊ ipa figa p ordinẽ mlcet p tũi. ⁊ p quanũ. ⁊ d ineqz p reliqs. Sin gñ. ut ſiq
tur mlcatio d8 ai f ꝯ patẽ 8 ſr ꝯ ⁊ mlcet 8 p ei 7z ponat z ſr 8 ⁊ fuer ima
nu 7 ⁊ mlcet ipa 8 p f ei zc ſr q addat ſuam 7 ei z7 ⁊ ponat ꝯ ⁊ z egdiem p
dcm̃ dco z7z ut i mq ē oſtendit. Jt̃ ſi quis mlcatoꝝ d 7 ai z08 ſerlũ 7



Mon. Sr̃s 7 mlcer̃ 7 ꝑs eī 46 ponat 6 7 remaneat 4 7 mlcer̃ 7 po facet o q̃ addat eī 4 suatl facet 4 q̃ ꝑtr ꝑ pōta 6 7 mlez 7 pz facet 21 q̃ ꝑtr ꝑ 46 · pōta 7 egdiū 21 46 q̃s ſūma dicte mlcatōrl. 7 sic una figa ſ plez mlcat. D eodem

Item si uoluīt mlcare 70 ps 1 dmat o d 70 remanz 7 7 mlcer̃ 7 ps 1 eī 467 eī nuō aī ponat o ꝓ eo quod d 70 abstulim? eī 4670 Jap̄ ꝑs sa sdi capitli

Cum aī trez figal ꝓ trez figal q̃l mlcare uoluīt. unit̄ salē regulam ei teuē edecem. l. ut sclent gd̄ um̄ nūm ḡdū alt̄. hē itm̄ subumta tibz. decne sub decml 7 cecne sub cecnz. 7 mlcer̃ ꝑma supioz nūm ꝑ ꝑma subūoal. 7 ꝑtr unitatez sr̃ ꝑmū ḡdū nuiōz. 7 decne sues̃ īmanu. 7 mlez ꝑmā sr̃ioal ꝑsam subūoal. 7 ꝑmā subūoal ꝑsā supioal. 7 addat utq; mlcatez aī suatl unitatibz. 7 ꝑtr unitatez. 7 decnal sues̃. 7 mlcer̃ ꝑmā supioē ꝑ ctuam ſrioē. 7 ꝑmā subr̃ioē ꝑtiā supioē. 7 sam ꝑsā. 7 addat trez dictaz mlcatez aī nuō suato. 7 ꝑtr unitatez sr̃ ctui ḡdū. 7 ꝑmā quāq; decnā suz īmanu 1 7 mlez sū supioz nūm ꝑtiā subr̃ioz. 7 sū mr̃ioz ꝑtiā sr̃ioz. 7 d collecta ſūma ꝑtr unitatez 7 decnaz retuer. 7 mlcer̃ ctiā ꝑtiā. 7 addat aī suatl decml. 7 ponat unitatez. 7 ꝑn ꝑtr decnal sl sr̃ fuīnt ꝓnz unitatibz. 7 si hēbit mlcationē quoz̄ ulbz nuiōz. tū figaī. siue equaleſ fiat siue inequaleſ.

Ad aī ra eandē tā sint eq̃leſ nūi 21 4 7 21 4 q̃l minimū mlcare oporteat. q collo cēt adinuicē sicut ī pgma collecta eē dict̄. 7 mlez 4 p 4 eī 24 ꝑtr 4 sr̃ utq; 4 sicut i sa d̄ceptōe dict̄. 7 p decnz sues̃ īmanu 2 7 mlcer̃ 4 sr̃ioz nūm p 4 sr̃ ctioal. 7 4 r̃ioal p 4 supioz. q̃bz addtz aī 2 suatz eī 4 2 ꝑtr 2 sr̃ nūz 4 si aut ītia 4 nec d̄ceptō. 7 sues̃ p q̃rtuor decml 4 7 mlcer̃ 4 sr̃ioz p 2 subr̃ioz. 7 4 r̃ioal p 2 supioal. 4 p 4 7 sūma ꝓnz tū mlcationū addat aī 4 in manu suatl eī 40 ꝑtr o sr̃ nūz 2 ut in quāta d̄ceptōe ostendit̄. 7 sues̃ in manu 4 7 mlcer̃ 4 sr̃ioz p 2 mr̃ioz. 4 mr̃ioz p 2 supioz. 7 addat aī 4 eī 2 7 ꝑtr 7 p o ut q̃rta patet d̄ceptō. 7 sues̃ īmanu 2 7 mlcer̃ 2 p 2 eī 7 addat aī 2 eī 11 q̃ ꝑtr ut ī tertia 7 ultima d̄ceptōe ostendit̄. Que mlcatio si recte ē p supeducū modū cognit̄ uidebiz ut addat figē d 24 4 supioz 7 dmat nī 7 remanebit 2 filr fiat de 24 4 mr̃ioz. 7 remanebit filr 2 7 mlcer̃ 2 p 2 d̄quibz dmat 7 remanz o q̃ tolleret p pēsa. ē colligē figē q̃s ī ſūma mlcationiz. s. 1 71 72 74 eī 7 d̄q̃bz mlcabit 7 remanz o ut oportet. Assignalo q̃dē q̃r mlcatio sr̃ figē p sū actiū aī mlcatē pmaz figaz. ītiaz. q aut dictū ē p m̄ gd̄. q̃cūq; mlcat ipm̄ ḡdū fuit ſs gd̄. q̃ūmq; mlcat sm̄ ḡdū fuit p ipm̄ quē mlcat. Et sic ē p m̄ ḡdz. mlcat ctui. ctui ḡdū fuit. Et aī ſs mlcat sm̄. fuit eundē. s. ctui dē ſs p ipm̄ quē mlcat. E oportet cum mlcatio sit gd̄ p sm̄ uigaī mlcationiz pmaz in ctiz. Sequit̄ mlcatio staz figaz ītiaz d quā puenit quāt ḡdz. s. ſs ab eo quē mlcat. Ad ultimū mlcat ctuz ḡdz p ctui d q̃ mlcatē pueni q̃nt ḡdz. s. ctuz ab eo quē ctui gd̄ mlcat. Et huic nē cthi q̃ pōnt ee mlcatē pmaz ītiaz. 7 sr̃ in sū posuim̄ unitatez in ctio ḡdu. 7 sua um̄ decnaz ad quātū ḡdū. Et cthi q̃ pōnt ee mlcatē suaz ītiaz.

z 1 4 6	
7	
z o 8	

4 6 7 0	
7 o	
8 1	

puma	
	z ꝑ 4
	z ꝑ 4
	4
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	z ꝑ 4
	z 4
tia	z ꝑ 4
	z ꝑ 4
	o z 4
qrta	z ꝑ 4
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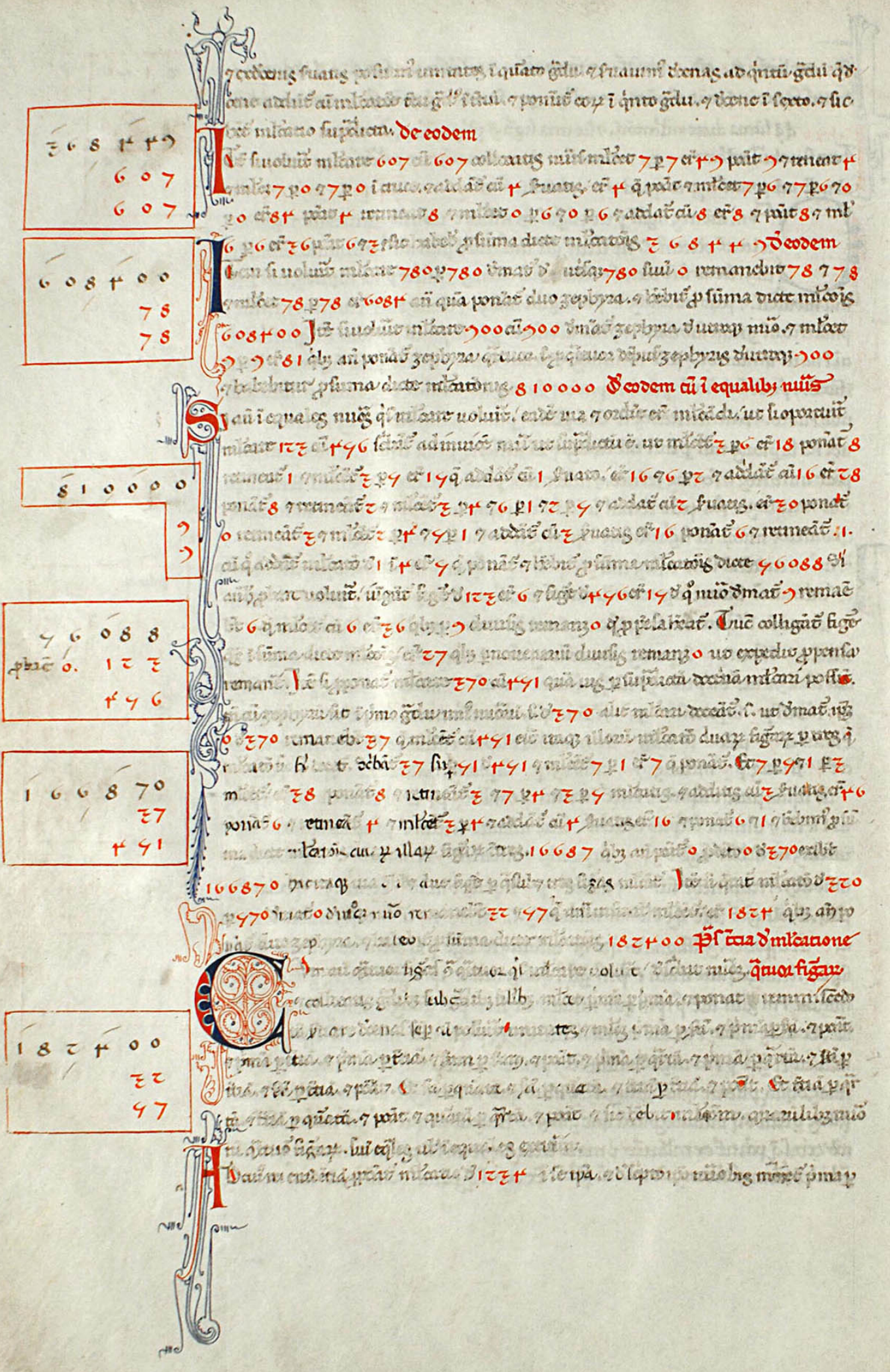
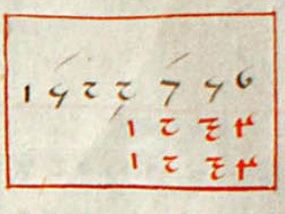
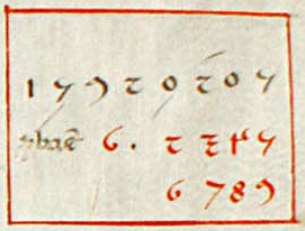
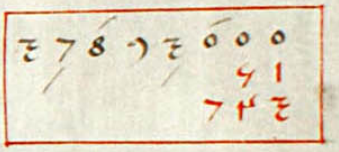
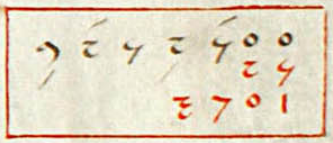
quta	z ꝑ 4
	z ꝑ 4
	11 o z 4
vltima	z ꝑ 4
	z ꝑ 4

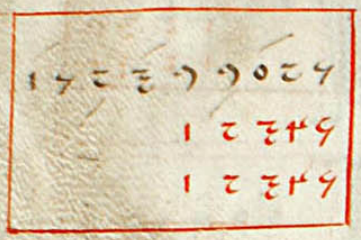












sup̄ dcm̄. mlc̄ꝫ ꝫ ꝑ ꝫ cr̄ z ꝫ pm̄ ꝫ ꝯ retineat z ꝫꝫ ꝑ ꝫꝫ ꝑ ꝫ addat aī z fua
us. cr̄ ꝑ z pm̄ z ꝯ retineat ꝑ ꝫꝫ ꝑ z ꝫꝫ ꝑ z ꝫꝫ ꝑ ꝑ ꝫ addat aī ꝑ fuatus. cr̄ ꝫ o po
nat o ꝯ retineat ꝫ ꝫꝫ ꝑ z ꝫꝫ ꝑ z ꝫꝫ ꝑ z ꝫꝫ ꝑ z ꝫ addat aī ꝫ fuatus/ cr̄ ꝑ ꝫ pm̄
ꝫ ꝯ retineat ꝑ ꝫꝫ ꝑ 1 ꝫꝫ ꝑ 1 ꝫꝫ ꝑ z ꝫꝫ ꝑ z ꝫꝫ ꝑ z ꝫ addat aī ꝑ fuatus/ cr̄ z ꝫ
pm̄ ꝫ ꝯ retineat z ꝫꝫ ꝑ 1 ꝫꝫ ꝑ 1 ꝫꝫ ꝑ z ꝫꝫ ꝑ z ꝫ addat aī z fuatus/ cr̄ z z pm̄
z ꝯ retineat z ꝫz ꝑ 1 ꝫz ꝑ 1 ꝫz ꝑ z ꝫ addat aī z fuatus/ cr̄ 1 z pm̄ z ꝯ retineat 1
ꝫz ꝑ 1 ꝫz ꝑ 1 ꝫ addat aī 1 fuato/ cr̄ ꝫ q pm̄. ꝫ 1 ꝑ 1 cr̄ 1 q pm̄. ꝫ sic hēbt sūmaz.
dcor mlc̄ōm. Siteadi rursꝫ hc modū mlc̄ādi ꝓcedē exhs q̄ accidē īt nūos ꝫ nō
mac̄ ꝓportāles. Nā aīr nūi ꝓportāles ꝫ ita q̄ sic pm̄ ē ad fm ita ſg fit ad ītum.
cr̄ mlc̄atō pmi ītū cſſ mlc̄atōi ſcdi mſc. Et aī q̄tuor nūi ꝫ ꝓportāles fuūt sicut
pm̄ ad fm. ita ītū ad quātū. Tūc mlc̄ato pmi mquātū. cſſ ē mlc̄atōi ītui ut ī eu
clide ꝛpnt. Facilat ē nūl in mſuris p gēl' ꝛmunes. q sic pm̄ gd' ē ad fm. ita ſg
ē ad ītui. ꝫ ītū ad quātū. ꝫ nūi q̄lz añ ecdētū ad sui ꝛſequētē. Cr̄ mlc̄ato fi gēdus.
mſc fac̄ eūdē gēdū facti ex mlc̄atē pmi ītū. Et mlc̄ato fi gēdus ī ītū fac̄ gēdū
facti ex mlc̄atē pmi mquātū. Ina pt̄ q̄dē ī mlc̄atōibz afigīs pm̄ gd' exq̄ mlc̄a
tē. aut ꝛpueri nūl pm̄i gēl'. aut tm̄ināl ī ꝛpō. Et ido ex mlc̄atē pme figē p pmam.
ponūt unitates ſr̄ pmū gēdū. ꝫ decē ſuāt. ad fm. aī q̄bz addūt mlc̄atōs pmaꝝ
in ſuſ. ꝫ pueniūt nūs fi gēdus. ut tm̄ināl ī ꝛpō. Cr̄ ponūt unitates ſr̄ fm gēdum
ꝛp una q̄q decena q̄rū ſuāt 1. ad ītū gēdū. Deīn mlc̄āt pme pītiaſ. ꝫ addūt aī eis
mlc̄atis ſe mſū. ꝛp mlc̄atō fi gēdus ī fm. fac̄ eūdē gēdū. quā fac̄ mlc̄atō pmaꝝ gm
duū ītuꝫ. Et ido ex mlc̄atōibz pmaꝫ figāꝫ. ītuaꝫ. ꝫ ſuꝫ in ſuſ. ponūt unitates
ſup ītū gēdū. p̄h mlc̄āt pme pquātas. ꝫ ſic p ītuaꝫ aī ſit in q̄tuor gēdus ꝓportālibz
q sic pm̄ ē ad fm. ita ītū ad quātū. ꝫ pueniūt ex pigs mlc̄atōibz nūs tm̄inaꝫ ī quarto
gēdu. Et ido ponūt unitates ſr̄ quātū gēdū. ꝫ mlc̄āt pū pme pquātas. ꝫ ſcde
pquātas. ꝫ ītie pītiaſ. ꝛp ē sic pm̄ gēdus ad fm. ita quār ad q̄tū. Cr̄ mlc̄ato fi
gd' in quātū fac̄ gēdū facti ex mlc̄atē pmi in q̄tū. ſ. q̄tū gēdū. ꝫ ē rursus ſg
gēdus ad ītui sic ītū ad quātū. Cr̄ mlc̄ato ītu gd' in ītū fac̄ gēdū facti ex mlc̄a
tē fi in quātū. ſ. q̄tū gēdū. Et ī ponūt unitates ſr̄ q̄tū gēdū. ꝫ sic fm ꝓpor
cōalitatē efficat' sūma quoꝝlibz nūoꝝ mlc̄atōis. Et h̄ possūt manifeste in
telligi in his q̄ ſequūt. Et notadū q sic pm̄ gēdus ē ad fm ita penultim̄ ē ad ultī
mū. ꝫ sic pm̄ ē ad ītū ita ītū ad ultimo ē ad ultimū. ꝫ sic pm̄ ē ad quātū ita
quār ad ultimo ē ad ultimū. ꝫc. In hac siquidē mlc̄atē q̄libz figāꝫ in q̄libz p
positiōm q̄tē figē ſr̄ q̄tuſ mlc̄atē ſe p q̄tuſ. ꝫ ītie pquātas. q mlc̄atēs facit
ſecūi gēdū q cāi ſg gd' mlc̄at q̄tū ſecūi gēdū fac̄. quē fac̄ mlc̄atio ītiaꝫ ī q̄tas.
cāi sit sic gēdus ad ītū. ita quār ad q̄tū. Deīn mlc̄āt ītie pq̄tas. ꝫ quā ta pquā
tū. ꝫ pueniūt septi gēdus. q cāi ītī gēdus mlc̄at q̄tū. fac̄ ītul gēdū ad q̄to. ſ. septi
mū. deīn mlc̄āt quārte pq̄tas. q facit octauū gēdū. ꝫ ultimū mlc̄at q̄tū
pq̄tā q fac̄ nonū gēdū. ꝫ sic hēt sūmā dicte mlc̄atōis. Post h̄ ē q d' mlc̄atē dā
s. q̄bz ī gemoſus post pfatū dcīnā mlc̄ādi hūe. tū ut nūeros h pfectā hūt dcīnā

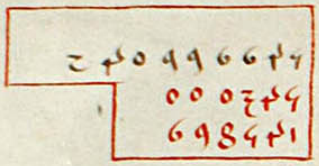
Cmlcom octauu gradus ostendere parauu. Pars quinta sedi capli.

Item aut quelibz nuim octo figuraz p qualibz nuim eide gradus qs mlcare uoluit mlcz pma p pma. 7 poat 7 pma p fam. 7 poat 7 pma p tia. 7 pma p tia. 7 fam p fam. 7 ponat. 7 pma p quarta. 7 pma p qrta. 7 fa p tia. 7 fa p tia. 7 ponat. 7 pma p quita. 7 pma p quita. 7 fa p qrta. 7 tia p tiaz. 7 poat. 7 pma p sexta. 7 pma p sexta. 7 fa p quita. 7 fa p quita. 7 tia p qrta. 7 tertia p quarta. 7 poat. 7 pma p septima. et pma p septima. 7 fa p sexta. 7 fa p sexta. 7 tia p qnta. 7 tia p qnta. 7 qrta p qrta. 7 poat. 7 pma p octaua. 7 pma p octaua. 7 fa p septima. 7 fa p septima. s. eas q s sec pma. 7 octaua. 7 tia p sexta. 7 tia p sexta. eo qd s sec fas. 7 septimas. 7 qrta p qnta. 7 qrta p qnta. io q s sec tias. 7 sextas. 7 poat. Et sic semp i oibz mlcatoibz abition pte ipe fige abiunce sep abuetq pte mlcade s. q sec eas existit q pmu mlcat. don eas ita mlcado se adi mce oiuerie. 7 te ponede sue umtates 7 dcene i mambz suad. Et e mlcato paz figa i relig p ordie gradati ascendendo opleta finit usz ad ultias. te peic reliqnd e pe fige utrozuq nuoz 7 pe pultimas. mlcad. h e ut i hac qce mlcet fa octaua. 7 fa octaua. 7 tia p septima. 7 tia p septima. q s sec fas. 7 octauas. 7 qrta p sexta. 7 quarta p sexta. q s sec tias. 7 septimas. 7 qnta p qnta. q s ie qrta 7 sexta. 7 poat. 7 ce reliqt fas. 7 mlcz tia p octaua. 7 tia p octaua. 7 qrta p septima. 7 qrta p septima. 7 qnta p sexta. 7 qnta p sexta. 7 poat. 7 reliquat tias. 7 mltucz qrta p octaua. 7 qrta p octaua. 7 qnta p septima. 7 qnta p septima. 7 sexta p sexta. 7 poat 7 reliqt qrtas. 7 mlcz qnta p octaua. 7 quita p octaua. 7 sexta p septima. 7 sexta p septima. 7 poat. 7 reliqt qntas. 7 mlcz seta p octaua. 7 sexta p octaua. 7 septima p septima. 7 poat. 7 septima p octaua. 7 septima p octaua. 7 poat. 7 octaua p octaua. 7 poat. 7 sic hebit mlcatio oiuz nuoz octo figaz. 7 ut i nuis clari itelligat sit nui 1 2 3 4 5 6 7 8 7 8 7 6 5 4 3 2 1 qut mlcet adiunce esentiat q qd fdem e 7 mlcz 8 p 1 er 8 q poat 7 8 p 2 7 1 p 7 er 23 poat 3 7 retineat 2 7 8 p 3 7 1 p 6 7 7 p 2 7 addat cu 2 fiat er 36 poat 6 7 retineat 6 7 8 p 3 7 1 p 4 7 7 p 3 7 2 p 6 er 73 poat 3 7 retineat 7 7 8 p 4 7 1 p 3 7 7 p 3 7 2 p 4 7 6 p 3 er 107 poat 7 7 retineat 10 7 8 p 6 7 1 p 3 7 7 p 4 7 2 p 3 7 6 p 3 7 7 p 4 er 143 ponat 3 7 retineat 4 7 8 p 7 7 1 p 2 7 7 p 6 7 2 p 3 7 6 p 4 7 3 p 3 7 4 p 3 er 183 poant 2 7 retineat 18 7 8 p 8 7 1 p 1 7 7 p 7 7 2 p 2 7 6 p 6 7 3 p 3 7 4 p 4 7 3 p 3 er 222 poat 2 7 retineat 22 7 7 p 8 7 2 p 1 7 6 p 7 7 3 p 2 7 4 p 6 7 3 p 3 7 4 p 4 er 190 poat 0 7 retineat 19 7 6 p 8 7 3 p 1 7 4 p 7 7 4 p 2 7 7 p 6 7 4 p 3 er 142 poat 2 7 retineat 14 7 4 p 8 7 3 p 1 7 3 p 7 7 4 p 2 7 7 p 6 er 114 poat 4 7 retineat 11 7 3 p 8 7 4 p 1 7 3 p 7 7 6 p 2 er 81 poat 1 7 retineat 8 7 3 p 8 7 6 p 1 7 2 p 7 er 52 poat 2 7 retineat 4 7 2 p 8 7 7 p 1 er 28 ponat 8 7 retineat 2 7 1 p 8 er 10 que ponantur. 7 sic habebit finma dee mlcationis.

Cetu si i quozlibz capitibz nuoz cephyra finis d mac d ipis nuis oia cephyra q in capitibz extitint 7 reliqs figas i siml mlcz 7 mlcatoi depta cephyra. aut poat 7 hebit ipoz nuoz mlcom ut isi. 7 tij. 7 qrti gdus. ml

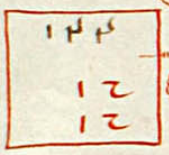
1 2 3 4 6 7 8
8 7 6 4 3 2 1

catões denotaꝝnt. ⁊ si p ſdictas mlcationũ demõſtrationes q̃s mlcatõz paucaꝝ figãrum õ plẽs ſcire nõ poſſit. diſcribat nueꝝ. ſ. maiorẽ ſubmnõi. h̃z ẽ nũm pliũ figãꝝ. ſub ipõ nũo paucaꝝ. collocãſ p̃mũ gdũ unũ ſub p̃mo alẽus. ⁊ dicẽdꝫ ut ſup̃dixim̃ alios gdus collocabit. ⁊ poſt p̃ nũm paucaꝝ figãꝝ tot cephyra q̃t figure ſup habũdãt dmaioi nũo. ⁊ ſic habebit eq̃les nueꝝ i mlcatõe. ut ſi q̃rẽt mlcare tres figuraſ cũ ſex. poſt nũm ſex figãꝝ ſub nũo trũ figuraꝝ. ⁊ poſt p̃ tres figuraſ tria cephyra. ut ſit i mlcõe ſex figure cũ ſex. q̃ſ ſm p̃ſcriptã dcãz doctrinã mlcabi grã. ut ſi q̃rat mlcare ⁊ cũ qđ dicti cephyroꝝ p̃ figãs dictũ ẽ ñ h̃ rudibz neccariũ fore arbitroꝝ q̃ ſubtiles ñ idigẽt tali poſitõe cephyroꝝ.



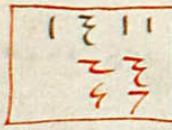
Pars ſexta ſcdi capli.

Etũ cũ ſuꝑſcriptã mlcãdi doctrina. freq̃nti uſu ĩtabla q̃s opãi ſcireꝫ. ⁊ uoluerit eãdẽ doctrinã cordcere ⁊ imambz abſq; tablẽ diſceptõe. i nũis ſcdi ⁊ ttij gdus. hãc retineat diſceptõm nueꝝ i cord q̃ mlcare uoluerit. ⁊ capiat mlcare ſm p̃ſcriptũ ordiẽz. ⁊ p̃mã poſitõm i manu ſiniſtra i loco unitatũ ponat ⁊ ſam. ſ. poſitõm i eadẽ manu i loco denaꝝ. Tertia uõ i manu dextra i loco cẽtenaꝝ. q̃rtã uõ in loco miliaꝝ ſtuderẽ ponẽ ꝺſueſcat. Quãtã uõ ⁊ dicẽs i cord retineat cũ i mãibz ãplius retinẽ ñ poſſit. ⁊ ſic hẽbit q̃libz nueꝝ mlcatõm ubi grã ut ſi uoluerit mlcare 12 p 12 retineat deſceptõm illoꝝ i cord. ⁊ mlcet. 2 p 2 faciũt 1 q 1 poſt i ſiniſtra manũ i loco unitatũ. ⁊ mlc 2 ꝺſupioribz 12 p 1 ꝺ infeꝛioribz. ⁊ 2 ꝺ infeꝛioribz p 1 ꝺſupioribz. ⁊ addat iſiml cr 1 q poſt i eadẽ manu ſiniſtra i loco denaꝝ. h̃ ẽ i ſig q̃ denaꝝ. ⁊ mlc 1 p 1 .ſ. fã figã p ſã faciũt q̃ poſt i manu dextra i loco cẽtenaꝝ. Et ſic hẽbit p q̃ſita mlcõe 1 1 1 ut i hac pagina ẽmetur.



Tẽ ſi cordcere uoluerit mlcare 18 p 18 mlcet 8 p 8 cr 61 poſt g 1 i manu ſiniſtra i loco unitatũ. ⁊ 6 retineat i manu dextũ i loco cẽtenaꝝ. Et mlc 8 p 1 ⁊ 8 p 1 ⁊ 7 addat iſiml cr 61 q̃ addat ẽ 6 ſuatis i manu dextẽ cr 70 exq̃bz poſt o h̃ ẽ nich i manu ſiniſtra i loco denaꝝ. ⁊ 7 retineat i manu dextẽ ẽ q̃bz addat mlcatõm ꝺ 1 i 1 .ſ. 16 cr 77 exq̃ poſt 7 i manu dextẽ in loco cẽtenaꝝ. Et 2 poſt i eadẽ manu i loco miliaꝝ. h̃ ẽ i ſig bis milleno. Et ſic hẽbit p q̃ſita mlcõe 770 1

Tẽ ſi mlcare uoluerit 77 p 47 retineat coꝝ deſcriptõe i cord ⁊ mlc 7 p 7 cr 71 poſt 1 i loco unitatũ i manu ſiniſtra. ⁊ retineat i manu dextẽ 2 ⁊ 7 p 4 ⁊ 7 p 2 ⁊ addat cũ 2 ſuatis cr 71 poſt 1 i loco denaꝝ ⁊ retineat i manu dextẽ 7 ⁊ 7 2 p 4 ⁊ addat cũ 7 ſuatis 17 cr poſt 7 i loco cẽtenaꝝ i manu dextẽ. ⁊ 1 i loco miliaꝝ. ⁊ ſic hẽbit p ſita mlcõne 1711



Tẽ ſi uoluerit cordcere mlcare 1 1 7 p 71 7 mlcet 7 p 7 retẽ Pars vij ſcdi capli. ta nueꝝ diſceptõe i cord cr 1 4 poſt 9 i manu ſiniſtra i loco unitatũ ⁊ diſceſſ retineat 1 ⁊ 6 7 p 1 ⁊ addat ẽ 1 ſuatis cr 60 poſt o i loco denaꝝ i manu ſiniſtra h̃ ẽ nich ⁊ retineat i dextra 6 ⁊ 6 7 p 7 ⁊ 1 p 1 ⁊ i ſiml uncis cr 61 poſt 1 i dextẽ i loco cẽtenaꝝ ⁊ 6 retineat i loco miliaꝝ ul i cord ⁊ 6 1 p 7 ⁊ addat cũ 6 cũ ſuatis cr 70 ꝺleat ꝺ loco mil 6 ⁊ ponat ibidẽ p o mẽ ⁊ retineat i corde 7 ⁊ 7 p 7 ⁊ addat cũ 7 ſuatis i cord cr 12 q̃ item retineat. ẽ ñ p̃ſit ipz i mãibz ponẽ ⁊ ſic hẽbz phac mlcatõe 120 1 0 9 Et ita ſi nueꝝ i cord retinẽ ſcire

ſaueãt ⁊ q̃ ad modũ edocet p egredi leuẽ q̃. i tabla poſſit mlcatões q̃libz nueꝝ ſi gdi ⁊ ttij cordcere i mãibz i ueiremam aũt quoſlibz numeros ⁊ q̃tũq; quis addẽ uoluerit. colloca eoz i Incip capli ttiũ ꝺ additõe i tegriez nueꝝ. i tabula ſ qđ in mlcatoibz nueꝝ p̃dixim̃. h̃ ẽ p̃mũ gdũ cũctoꝝ nueꝝ quos addẽ uoluerit ſub p̃mo ipius qui aũ in ũctionẽ poſt fuerit Et ſm ſub ſo. ⁊ dicẽs qui ſequitur. Et tunc incipiat in manibus colligere numeros figurarũ q̃ in primis gradibz cũctoꝝ nueꝝ q̃ in ũctõm poſiti fuiũt. ab iſtoi nũo uſq; ad ſi

ꝓportē. ascēdēdo. ꝑtē itaq; unumquēl sr̄ ꝑmū gradū multiꝑ. ⁊ denal i manu rēf uert.
q̄bz denis sr̄ addat multꝫ q̄ fig gradibz ocurrūt. ⁊ ꝑtē unumquꝫ sr̄ sm gradū. ⁊ nūq
denal refiz. Cū q̄bz collectiōz tm gradꝰ multorū sr̄ addat. ⁊ sic ponēdo unumquꝫ ⁊
denal refuādo gradū multꝫ colligēdo pōt collectōz aīcoz multorū usq; ad infi
nitū bre. Et ut melī itelligat ūicatōz duoz multoꝝ ⁊ q̄ti. nec ñ ⁊ phū ostendam.

Vt ꝺ alī mod multādi uel ꝺ laudabilē maxīe in mlādis magꝫ multꝫ quē ostēdā
in mlatē ꝺ 467 ifra 1 Costituat q̄dratū in forma scadenī. brīs puncta ⁊ in
tegra dē. s. unū pl̄ multo figat maiorē nū. ⁊ tm̄ i latitudie pūcta 2 sicut
2 ergo figē i minori nūo. ⁊ poāt maiō nūz sr̄ q̄dratō sup̄ducū. ⁊ minō pōt
tam ipz. ut hēmus. ⁊ mlcet ꝑma figa minorē nū. 1 ⁊ 1. s. ꝑmā ꝑ maiorē
nū sua ergo. ⁊ q̄ poāt i ꝑmo pūcto sr̄orū lineo. s. sub ipō 1 ⁊ mlcāt ⁊ ꝑdūt figā
maiorē nūi. s. yz et ifra ponāt ꝑ sub 2 ꝑ ꝓxīo ⁊ s. ifo pūcto sr̄orū lineo. ⁊
fuerit 1 cū q̄ addat mlatō cōtīdē ⁊ i 2 et ifra pāt 2 i tcio pūcto ꝑ ꝑ ꝓxīo. ⁊ sic
2 cū q̄bz addat mlatō ꝺ ⁊ i ꝑ. s. i ultīa ñra figā maiorē nū et 2 o ecq̄bz pāt
o i quāto pūcto ⁊ i q̄nto. Dūo q̄ m mlabūt 6 figlarit ꝑ 1 yz ⁊ yz ⁊ ꝑ et
habē 6 i ꝑmo pūcto sr̄ lineo. ⁊ i ſo. ⁊ 9 i tcio. ⁊ 4 i quāto. ⁊ i q̄nto. q̄ dē fiat ꝺ
q̄nq; q̄ s i ultīmo gradu multorū nūi. ⁊ habē 4 i ꝑmo pūcto ētro lineo. 10 in ſo.
6 i tcio. 1 i q̄rto. ⁊ i q̄nto. Deīn ꝑ ⁊ q̄ ponāt s i ꝑmo pūcto ponāt ⁊ sr̄ 1 ad
dāt 6 ⁊ ꝑ q̄ s i ultīo gradu oppōta ꝑ ipsa ⁊ et 10 pāt o sr̄ ⁊ fuerit 1 cū q̄ addat ⁊ ⁊
2 ⁊ q̄ dē s i ultīo gradu oppōta ꝑ ipsam 6 ⁊ et 10 pāt ītūm o sr̄ tm̄ gradū. ⁊ sr̄
2 ⁊ fuerit ītūm 1 q̄ addat cū 0 ⁊ 0 q̄ rūs s i ultīo gradu oppōta ꝑ dicta 4 ⁊ 2 et 10
pāt ītūm o sr̄ ⁊ s sr̄ ultīmū gradū multorū nūi. ⁊ fuerit ītūm 1 q̄ addat cū 6 ⁊
2 ⁊ q̄ s i sēpta oppōtū et 1 q̄ ponāt in sexto gradu. dīm pāt 2 i sexto gradu ꝑ
2 ⁊ q̄ s i anglo q̄rto ꝑdictū oppōtū dī 2 ⁊ rēb ꝑdictam summā.

Si q̄cunq; fuerit additionū ꝺ 4 cū 3 collige 3 sub 4 tm̄ q̄m debēt ergo ad ītuē
niēdū. addat ⁊ cū 4 et 1 pāt ꝑ sr̄ ꝑmū gradū. ⁊ ꝓdeūs refuso i manū 1 q̄
addat cū ꝑ ⁊ at 2 et 7 q̄ pāt. ⁊ sic habebūt ꝑ eorū collectionē. 7 ꝑ urb addūt.

Cum uoluīt fuerit collectiōn ꝺ 12 2 cū 4 467 ꝺ fuerit ergo urb ītūm. ⁊ addat 7
cū 2 et 10 pāt o ⁊ remanet 1 q̄ addat cū 6 ⁊ at et 3 q̄ pāt. Jūo addat 4 cū 1 q̄ s ītūo
gradu et 6 q̄ pāt sr̄ eīdē gradū. ⁊ ꝑ q̄ s i q̄rto gradu multorū nūi ꝓb ꝑ mquam
gradu exurnat summe. ut ſ fuit aliq̄ figa sr̄ ipsā 1 alio nūo. s. i 12 2 ⁊ sic habebūt ꝑ
eorū additionē ꝑ 6 90

Cum uoluīt addē ꝑ 22 1 cū 4 0678 ꝺ scīptus ergo ordīe ꝓscīptus addat 3 cū 1 et 10 pāt
o ⁊ remanet 1 q̄ addat cū 8 ⁊ at et 11 pāt 1 remanet 1 q̄ addat cū 7 ⁊ cū 2 et 11
ītūm pāt 1 ⁊ remanet 1 q̄ addat cū 0 q̄ in multiplo nūo et 1 q̄ pāt sua ergo i summa
q̄rtū gradū. ⁊ ꝑ q̄ habē 4 in multiplo nūo. pāt i summa sua ꝑtē ad scdm gradū. ⁊ sic ha
bebit in summa ūmeratōz rērum. ꝓbatio

Si aūt ipsā collectionē ꝑ scām placere uoluīt. accipiat scām ꝑ nouenariū ꝺ ꝑ 22 1 q̄ē 1
sicut i mlcōbz docet. q̄ addat cū scām ꝺ 4 0678 3 q̄ē 8 et 3 ꝺ q̄ dīmāt 3 ne

ponāt 4 i q̄rto gradu et fuerit unum q̄ addat cū 1. et 2. q̄ sunt in sequenti oppōne erunt. ꝑ q̄ pāt

			ꝑ	2	1
2	0	2	ꝑ	7	1
2	4	3	2	6	0
2	1	6	0	4	4

7 ꝑ
2 4
ꝑ 3

ꝑ 6 3 0

3 2 1
ꝑ 4 6 7

4 1 1 1 1 0

ꝑ 2 2 1
4 0 6 7 8 3

mam o q̄ ꝑla. ⁊ tm̄ accepit ꝑlā d̄ sūma nūmoꝝ. s. d. ℔ 1111 o inuenier eā ē
o ut oporteret sūmū ut o stādo un̄ mīl ꝑtiū ꝓcedat sīt duo mīl. a. b. ⁊
b. g. quoꝝ unū mīl addē uolumꝰ. erit g. mīl. ecc̄s nūl. a. g. dico q̄d ē ex add
dim ꝑlā mīl. a. b. cū ꝑlā nūl. b. g. ꝓueniet g. Rursꝰ ꝓmā d̄ unū q̄lq; nūoꝝ. a. b.
⁊. b. g. dimidiū in regūla ꝑ ⁊ cū mag ⁊ cōīl mēsura nūmeꝝ. a. b. ⁊. b. g. Cū uer
nūl. a. g. dimidiū i regūla ꝑ ⁊ erit g ꝑla ipī zephyr ut hēc exactiōe plānū
nō ꝑtin nūoꝝ. a. b. ⁊. b. g. Itē un̄ illoꝝ dimidiū in regūla ꝑ ⁊ alī nō exeat nūg. a.
b. ille q̄ in regūla dimidiē ꝑ ⁊ ex nūo. b. g. demo ꝑ ⁊ remanent nūg. v. g.
g nūl. v. b. ⁊. b. a. dimidiē in regūla ꝑ ⁊ ex uer g. v. a. nūl ꝑ ⁊ dimidiū. Et q.
nūl. a. g. si subtrahat nīm. a. d. remāo. b. d. ⁊ nūl. a. d. dimidiē mensa nūo
ꝑ ⁊ remanebit g ex toto a. g. nūl. ꝑ. g. d. medietas ꝑ ⁊ q̄ ꝓuenit ex ad
ditiōe ꝑle mīl. a. b. q̄ ē zephyr. cū ꝑte nūl. b. g. q̄ ē nūl. ꝑ. d. g. Rursꝰ nūg.
illius nūoꝝ. a. b. ⁊. b. g. dimidiū in regūla ꝑ ⁊ ex nūo. a. b. remaneat nūg
a. e. ⁊ ex nūo. b. g. remanent nūg. e. g. Reliqua q̄ē sūt nūg. e. b. ⁊. b. d. di
midiū in regūla ꝑ ⁊ ex uer e. d. dimidiū ē. q̄ sit equalis mēsuradiē nouē
narioꝝ ꝑtiū. remanēt g medietas nūl. a. e. ⁊. d. g. ex toto nūo. a. g.
q̄ ꝑ ꝑle nūoꝝ. a. b. ⁊. b. g. exponūt ꝓportiōe ꝓueniūt pensa nūl. a. g. ut o
portebat ostēdē.

Cōtinuoluī addē. 2 ⁊ 4 6 1 6 7 8 ⁊ 7 8 4 ⁊ 1 ⁊ 10 7 18 declarāt q̄ nū
pondus sicut i pōdē pōlus ⁊ addat nūm figūr. q̄ figē ꝑ mā pribus cū to
tū diuisoꝝ nūoꝝ in ꝑpendo ab unitate. s. 8 ⁊ 1 7 8 ⁊ 7 1 ⁊ 4 sēp unam situit
colligēdo. et 2 2 pōt 2 ⁊ remanet 2 sīt q̄ colligat nūg figūr q̄ i 1 so gdu nūo
rū. s. 1 ⁊ 7 ⁊ 7 4 8 6 7 2 et 2 4 pōt 4 ⁊ remanet 2 sīt q̄ adcēdat colligēdo
nūm figūr tm gdus. s. 7 ⁊ 4 ⁊ 7 7 4 et 2 4 pōt 4 ⁊ remanet 2 sīt q̄ addat
unū figūr q̄ ꝑ i quīto gdu. s. o ⁊ 6 et 8 q̄ pōt ꝑ b pōt 1 ꝑ 1 ⁊ relinq̄t nō quo
gdu unitoꝝ nūl aī nīhī i reliq̄s nūg figē facies eundē gdū. ⁊ sic hēbis q̄ coꝝ
collectū 1 8 4 2 ut hic ostēdit.

Nam collectōm si placuerit uolueris colligat ꝙ figāt q̄ ꝑ oīa nūg. ⁊ colligēdo sēp re
liq̄t nouenar. ⁊ q̄d sit sub relictis nouenis, ꝑla sūme hūmt. Nā unitatū
nūoꝝ uicē nō indigem placē aī nīm ꝙto possim recolligē sūmā quā
ꝓpla. Volo dēmonstrare un̄ b mō addēdi ꝓuenit. addūt q̄ē ꝓmum
ꝙ figē q̄ ꝑ i ꝓmo gdu oīū nūoꝝ. q̄s addē uolumꝰ ecq̄ o uicē aī ꝙ ipe figē sit
unitatū colligit nūg unitatū. Cū ponit ꝑ unitatū i ꝓmo gdu. ⁊ dcene re
fuīad ad fm. aī dcene sit 1 so gdu. q̄r aī ipis dcenis suaus addim ꝙ nūg fi
gūrū q̄ ꝑ 1 so gdu mīoꝝ oīū. ⁊ q̄t unitatū ecq̄ū collectōe ꝓueniūt. uel dc
cene bēnt in sūma collectōis. q̄r ponit unitatū i so gdu aī ipe unitatū
dcene sit. q̄ prima q̄ dcena suat unū ad ītū gdū. Nā q̄d dcenū esse at
tēdat nīl aliud q̄ unitatū addūt nūm ītū gdū oīū nūoꝝ. ⁊ q̄d ꝙ pāt
ecq̄ū collectōe ē ex nūo ītū gdū. s. cētenariorū. Et id ponit unitatū ꝙ

1 8 4 2
2 4
4 6 1
6 7 8 7
7 8
10 7 1 8
4 7 1

Tuo ḡdu. ꝙ ſuāt ꝺene adquātū. ꝙ io ḡdaū ꝓ ſumaꝝ ḡd' colligēdo ꝙ ſumis ḡdibꝫ ſigāſ ponēdo uſq; ad finē nuōrum puenim.

Cum aū ſim ꝑ ſcīptū nr̄i doctōris. muīꝫ ad hēt qſ ſcīt. ꝙ uolūt colligē ſū mas expēſaꝝ manū ſimultū ī qbꝫ ꝺmōrāt. libr. ꝙ ſ. ꝙ ꝺn̄. Intelligat a cāme rario ut ſcīa. t' aretū mātore. ſm qꝺ ꝺcīt ſing'lāt' expenſaſ. t' ꝑtes ſigla tē ḡnūlibꝫ retū. ꝙ ꝺſcēdat ſtabula ī medio ꝑtū ꝙ aſ ap̄ret' colleāſ libās ſub libul. ſolꝺos ſub ſolꝺis. ꝺn̄os ſub ꝺn̄is. expēſaꝝ rem̄ cui' er ſtāt. t' ātte. ꝙ tūc faciat ſe ſcīpm̄ ab ip̄o qꝺ expēſaſ retūlerat ab initio. ne forte ab ip̄o fall atꝝ ꝺſcīpſiſſe mal'la. ꝙ ea rectā ī tabla ꝺſcīptē expēſaꝝ colligat. qꝺ ꝺn̄os. ꝙ faciat ūi ſolꝺos. ꝙ qūlꝺ ſ' reſtūlit. ſolꝺi ſ' rebus. ꝙ faciāſ ſolꝺi. ꝺſcēdat ſub ſolꝺis ī tabla. ꝙ colligat eos. ꝙ ꝺ eoꝝ ſūma faciat libās. qſ ꝑāt mīcū in ſūma ūtē libraꝝ. et ꝙ ſol'. qꝺ ſupſūme ſēs libꝫ. ſ' ſolos ꝑ ꝺnarios ſ' ſuos reſtuet. ꝑ ſ' acoꝝ ſū mā librāꝝ. ꝙ ſic ꝺſcēdat ſūma ūſ pagine ut ſ' ꝺtū. Hoc ꝙ ſ' ſuāt ſ' ſū mā ſ' ſū ī ōdā expēſa qꝺ ſtuſſ ī tali. ꝙ tabulis ſ' ſ' ſ'

Inapte caplm qrū d ēuacōe minor numeror de maiorib;

Im aū nūm d mīo qs cēdē uoluīt dsdar mnorē nūm sub maiorē. collocāt filg gd sub filib; 7 iapnat cēdē pma figa mnorū nūi d pma maiorū. 7 poāt sr bimdāt nūm sr pmas figas. Et sū cēdat d su. 7 poāt residui sr su. 7 tna d tna. Et relīqt d relīqs pcedīt sēp residua ponēdo. Et ai figa mnorū nūi. d figa cāde gd maiorū nūi cēdi una luīt. īo q ipa d mnorē mīo maior cīt tm edd gdu qua ipa d maiorē. Et figē maiorū nūi addēda ē decem. 7 d quīco mīo. figa mnorū nūi cīt cēdēda. Et puīc nō dicī decem i manu mnorē cīt reseruada. Et ipa septīa figē mnorū nūi sr addēda. 7 q sum qrtus d sexto figa cāde gd si possībile fuīt cīt cēdēda. sin aū. d addīto decimo. ut suspcīt cēdat. 7 sic gdu usq; ad ultīmā figa mnorū nūi o quīto cīt gdu dēdi. 7 si maio nūi mnorē in gdib; sr habūdauīt figē d in gdib; cēdūt i fine ap ponēd. Et sic debēt residui d q; filib; cēdī nūeris. Ibi gīa. ut si uoluīt qs d 8 cēdē 24 ponāt 24 sub 8 uti huc māgie ostēdat. cēdīs mag 4 d 3 remanēt 4 q poāt sr 3 7 cēdāt 2 d 8 remanēt 4 q poāt sr 8 7 sic hēbūt 4 residuo poīte cēdēdis 44 7 si 24 d 84 cēdī uoluīt d sēptīs mīs cēdat 3 d 4 d qs i possībile. vii addas 10 cēdē 4 cēdī 14 d qb; cēdūt 3 remanēt 6 q poāt. 7 pactus 10 remanet i manu 1 q addat aī 2 cī 4 q cēdat d 8 remanēt 4 q poāt sr dictā 8 7 sic hēbūt 46 4 residuo poīte

Tem si uoluīt cēdē 80 d 252 poāt 80 sub 252 cēdīno d 2 re q extractoīs manebit 2 que poāt. 78 dmat d 3 remanz 1 qd poāt. pb poāt 2 q habūdat mnorū nūi. 7 sic hēbūt 21 2 residuo dicte extractoīs.

Tem si ad d 280 uoluīt cēdē 32 d sēptīs 32 sub 280 7 aī sic i possībile d 0 cēdē 2 addat ad 2epiyro 10 cī 10 d qb; cēdūt 2 q; i mnorū nūi remanēt 8 q poāt 7 q addat 10 remanet i manu 1 q addat aī 3 cī 10 q extrahēda cīt d 8 si fuīt possībile. q aī possībile si sic cēdat d 18 remanēt 8 q poāt 7 remanet 1 q extrahat d 2 remanēt 2 q poāt. 7 sic hēbūt 288 residuo dicte extractoīs.

Tem si q̄nt residui d 4747 cēdat d 373 d sēptīs mīs. cēdat 7 d 3 remanet 2 q poāt. 7 4 extrahat d 12 aī sic i possībile ipa cēdē d 2 remanēt 8 q poāt. 7 remanet i manu 1 q addat aī 4 cī 4 q cēdat d 3 remanēt 4 q ponat 7 sic hēbūt 4872 residuo dicte extractoīs.

Tem si uoluīt cēdē 81 1 d 19728 cēdūt 1 d 8 remanēt 7 q poāt remanz 3 q poāt. 7 remanet in manu 1 q addat aī 8 cī 3 q cēdat d 17 remanz 8 q poāt 7 remanet 1 q cēdūt d 4 q 81 i quato gdu sīnoīs mīi. remanī 4 que poāt. 7 pū poāt 1 q restat i q̄nto gdu cāde mīi. 7 sic hēbūt 1487 residuo dicte extractoīs.

Tem si uoluīt cēdē 2 8 21 d 8 172 8 extrahūt 1 d 8 remanēt 7 q ponat 3 cēdat d 12 remanēt 2 q poāt. 7 remanet 1 qd addat aī 2 cī 4 q cēdat d 7 remanēt 2 q poāt. Ide 8 q 81 i quato gdu mnorū mīi cēdūt d 11 f. d 1 q

ō īcedē ḡdu maiorꝭ nūī. ⁊ dēm aīo ei ſr̄ actū. remanꝫ ꝫ q̄ pūt ⁊ retinat
1 q̄ addat eī ultīma figā mīnorꝭ nūī. ſ. aī ꝫ erꝭ ꝫ q̄ extūr d ultīa figa maiorꝭ
nūī. ſ. d 8 remanēt 4 q̄ pūt. ⁊ ſic hēbit 4 ꝫ ꝫ ꝫ 7 ꝓ reſiduo dicte exc̄cōis, ꝓbatio

Sm̄ pēla pſcpturꝫ exc̄cōnū ut q̄libꝫ alīaꝫ q̄l nolle uoluīt. ⁊ capiat pēla ultīo
nūp mīoꝫ ſm q̄ īmt̄atōibꝫ ꝺcetur. Et exc̄etur pēla minorꝭ nūī ſi poſſibile fuīt
d pēla maiorꝭ nūī. ſin aūt. addat ſr̄ pēla maiorꝭ nūī. nūm pēle. ſ. 9 ⁊ reſiduū
ꝓ pēla ēd exc̄cōis hūt. ⁊ hi gīa. pēla maiorꝭ nūī. ſ. d 8 1 7 2 8 ē 8 ⁊ minorꝭ ſ.
d 2 8 2 9 1 ē 4 ⁊ exc̄etur 4 d 8 remanēt ꝓ pēla ꝫ ut in ſūma neutrūr reſidua

Item exc̄etur 4 ⁊ 6 2 d 8 2 8 ꝫ remanēt 2 8 2 1 pēla maiorꝭ ſ exc̄cōis repitur.
nūī ē 4 minorꝭ nūī ē 8 ⁊ ei ñ poſſit exc̄ubi 8 d 4 ſ. ꝓ pēla minorꝭ numꝰ
addāt 9 ſr̄ pēla maiorꝭ ſr̄ 1 ꝫ d q̄b; exc̄etur 8 ſ. pēla minorꝭ nūī remanēt
4 q̄ꝫ pēla reliqua dicte exc̄cōis. ſ. d 2 8 2 1 ut hic oſtēdit. Inap capitlin q̄uū de

Olenabꝫ ſare duude q̄ſlibꝫ nūoꝫ ⁊ neceſſariū ē eīs duuſlonibꝫ īegrorum
ut addiſcāt pīa duude q̄ꝫ nuoꝫ ꝓ nuoꝫ q̄ꝫ abnatio uſq; numerorꝫ
indecenariū. ⁊ aī hoc ſcire ñ poſſit. dēe q̄dā īcreducēoꝫ duuſionū q̄nū
dā nūerū ꝓ ipoꝫ ordinē. ſcīat q̄ꝫ duuſicēoꝫ īſcīptibꝫ pagīnīꝫ īuabit declarāt.
ꝫꝫ ⁊ decem pīnū q̄lr̄ cuncta numera nuōrū pfecte ſcribāt.

Cum ſr̄ quelibꝫ nūīy q̄dā ūgla pcīa fuīt. ⁊ ſr̄ ipā q̄libꝫ alī nuꝫ dſcpē fuīt. ſr̄or
nūl pūtē ut pūteꝫ īſtoꝝ nūī affirmat. nā īſtor dnoīat. ⁊ ſr̄or dnoīaꝫ appīatur.
vt ſi ſr̄ binarū pcīa fuīt ūngla. ⁊ ſr̄ ipūy unitas d ſcpta ſr̄. ipā unitas ūnā
pūtē d duabꝫ pūtibꝫ unī īteḡ affirmat. h̄ ē medietatē ſic. ½ dnomat ītū. ⁊ ſi
ſr̄ ſeptenarū ſic ⅐ ſeptimā. ⁊ ſi ſr̄ 10 denā. ⁊ ſi ſr̄ 19 nonā denā pūtē unī īteḡ
affirmat. ⁊ ſic d ceteris. Ter ſi binarū ſr̄ ternarū exhīt ſic ⅔ dual pūteꝫ d tribꝫ partibꝫ
unī īteḡ affirmat. h̄ ē dual ternas. Et ſi ſr̄ 7 dual ſeptimas ſic ⅔ ⁊ ſi ſr̄ 17 duas
ūngeſimas ītas dnomāt. ⁊ ſic d ceteris. Ter ſi ſeptenarī ſr̄ nouenarū pōt fuīt ſic.
⅔ ſeptē nouenas unī īteḡ affirmāt. ⁊ ſi 7 ſr̄ 97 ſeptē nonageſimas ſeptas dnomāt.
Ter 17 pōta ſr̄ 19 nec̄ ūngeſimas nonas affirmāt. Et ſi 17 & ſr̄ 17 17 nec̄ cēte
ſimas q̄dringeſimas ſeptas nc̄iabit. ⁊ ſic dcīq; ſ nuꝫ ē intelligendum.

Item ſi ſub una cūd ūgla plēs nūī pōa fuīnt. ⁊ ſr̄ unū q̄q; ipoꝝ alū nūī dſcdent.
nūlꝰ q̄ tamen ūgle decem pūtes ſr̄ nūꝫ pōt fuīt ipī. ſub pōa nūī pute. l. pūteꝫ ut p
dicem dnomabit. Duo ſr̄ ſmꝫ. ipī ſdī pūteꝫ d partibꝫ pīm ſub pōa nūī dclinat. Tres
aūt ſr̄ ītū. ipī ītu pūteꝫ pūtiū ſr̄ d partibꝫ pīm affirmat. ⁊ ſic ſēp q̄ ſequīt ſr̄ ūglaꝫ
pūteꝫ pīnū cuīcoꝝ añcedētū ſub ūgla dnomāt. ut ſi ſub q̄dā ūgla fuat 2 7 ⁊ ſr̄ 2
ſit 1 ⁊ ſr̄ 7 ſit 4 ut h̄ cernit. dnomāt q̄tuoꝝ ſeptē. ⁊ medietaꝫ unī ſeptē. Tria ſr̄
7 cēt cephyꝝ ſic. ½ 0 7 medietat ēē unī ſeptē dnomāt. Ter ſub q̄dā alia ūgula
ſit 2 7 6 7 10 7 ſr̄ 2 ſit 1 7 ſr̄ 6 ſit 4 7 ſr̄ 10 ſit 7 ut h̄ oſtēdit. ½ & 7 6 10 ſeptē
& ſr̄ 10 ſanpite ūgle repſentāt ſeptē denas. 7 4 q̄ꝫ ſr̄ 6 dnomāt q̄libꝫ ſeptē unī
tame pūte. 7 1 q̄ ē ſr̄ 2 dnomat medietatē ſeptē unī dēe pūte. ⁊ ſic ſigīlatī d ſi
guī ītelligat. ēē moīedū ē ut ſēp minorꝭ nūī ſit ūtē ſiniſtrā ſub eadē ūgla. ſꝫ ſi

proba eſt 2
7 2 2 2 7

8 1 7 2 8
2 8 2 9 1

proba eſt 4 2 8 2 1

8 2 8 2
4 4 6 2

d pēla ero ioris nūī

d pēla minorꝭ nūoꝫ

Ter ſr̄ ternarū ipā unitas poſita fuīt ſic ⅓

plēl fuīt ūgle rupta uñ ūglē ñ rēsp̄dēt rupt alt̄ī. ⁊ alia ūgla q̄ē maior pūg in
tegr̄. sēp̄ ē ponēda ūl' dextr̄ manū. Dicīt̄ ē q̄dē fractāē, q̄ꝫ ī una ūga cē in gēdib⁹
⁊ ē p̄m gēd' aut̄ finalio q̄ē ī capite ūgr̄ dextrā p̄te. Cōīt̄ ē fractō siq̄d ūfluꝫ si
nistrā q̄ētet. Vltgrā in sta ūga. s. in $\frac{1}{2}\frac{2}{6}\frac{7}{10}$ fuīt $\frac{7}{10}$ ī p̄mo gēdu ipī ūge. ⁊ $\frac{5}{6}$
ꝫ i sc. ⁊ $\frac{1}{2}$ ē ī tcio. hē ī ultimo gēdu cādō ūge. ⁊ sic q̄tꝫ nūī sub ūga. vor ꝫ gēd' cādē.
Et si ūga fuīt plēa rupta. ⁊ ipa ūga tūma ūnt ī cēlo. tc fractāē ei. alr q̄m dictū
sic dnotāb. ut i hac. $\frac{2}{2}\frac{4}{7}\frac{6}{7}\frac{8}{5}$ cui ūge fractāē dnotāt. octononas uñ integr̄. ⁊ sex
septimas d octononis. ⁊ q̄tuor q̄tas sex septīas d octo nonis q̄tuor q̄tas q̄tuor
q̄tuor sex septīas d octo nonis uñ integr̄. Et sīl ūga tūmanet ab alia p̄te in
cēlo sic. $\frac{8}{2}\frac{6}{7}\frac{4}{7}\frac{2}{2}$ dnotatꝫ nō duas tūas d q̄tuor q̄tis d sex septimis d octo nonis
uñ integr̄. Jtē si ūgle grales ēnt sī ūga ī hōc modō $\frac{1}{7}\frac{1}{4}\frac{1}{2}\frac{5}{5}$ dnotāt fractāē eius
q̄q nonas ⁊ tūa ⁊ q̄tā. uñ nonas. Istas ītētās in ductōēs p̄t te ut in
fcīs ēnt dictū. ⁊ cēdimus fūmo studio adhibeantes.

Diuisiōēs p binarium

½	de	1	ē	0 remanēt 1
½		2	ē	1
½		3		1 1
½		4		2
½		5		2 1
½		6		3
½		7		3 1
½		8		4
½		9		4 1
½		10		5
½		11		5 1
½		12		6
½		13		6 1
½		14		7
½		15		7 1
½		16		8
½		17		8 1
½		18		9
½		19		9 1
½		20		10

Diuisiōēs p ternarium

⅓	de	1	ē	0 1
⅓		2		0 2

⅓	3	1	
⅓	4	1	1
⅓	5	1	2
⅓	6	2	
⅓	7	2	1
⅓	8	2	2
⅓	9	3	
⅓	10	3	1
⅓	11	3	2
⅓	12	4	
⅓	13	4	1
⅓	14	4	2
⅓	15	5	
⅓	16	5	1
⅓	17	5	2
⅓	18	6	
⅓	19	6	1
⅓	20	6	2
⅓	21	7	
⅓	22	7	1
⅓	23	7	2
⅓	24	8	
⅓	25	8	1
⅓	26	8	2

Introductōēs q̄narii

¼	1	0	1
¼	2	0	2
¼	3	0	3
¼	4	1	
¼	5	1	1
¼	6	1	2
¼	7	1	3
¼	8	2	
¼	9	2	1
¼	10	2	2
¼	11	2	3
¼	12	3	
¼	13	3	1
¼	14	3	2
¼	15	3	3
¼	16	4	
¼	17	4	1
¼	18	4	2
¼	19	4	3
¼	20	5	
¼	21	5	1
¼	22	5	2
¼	23	5	3

1/4	24	6	
1/4	25	6	1
1/4	26	6	2
1/4	27	6	3
1/4	28	7	
1/4	29	7	1
1/4	30	7	2
1/4	31	7	3
1/4	32	8	
1/4	33	8	1
1/4	34	8	2
1/4	35	8	3
1/4	36	9	
1/4	37	9	1
1/4	38	9	2
1/4	39	9	3
1/4	40	10	

Introductiones quinarii

1/5	de	5 est	1
1/5		10	2
1/5		15	3
1/5		20	4
1/5		25	5
1/5		30	6
1/5		35	7
1/5		40	8
1/5		45	9
1/5		50	10

Introductiones sexnarii

1/6	de	6	1
1/6		12	2
1/6		18	3
1/6		24	4
1/6		30	5
1/6		36	6
1/6		42	7
1/6		48	8
1/6		54	9

Introduciones septenarii

1/7	de	7 est	1
1/7		14	2
1/7		21	3
1/7		28	4
1/7		35	5
1/7		42	6
1/7		49	7
1/7		56	8
1/7		63	9
1/7		70	10

Diuisiones octonarii

1/8	de	8 est	1
1/8		16	2
1/8		24	3
1/8		32	4
1/8		40	5
1/8		48	6
1/8		56	7
1/8		64	8
1/8		72	9
1/8		80	10

Diuisiones nouenarii

1/9	de	9 est	1
1/9		18	2
1/9		27	3
1/9		36	4
1/9		45	5
1/9		54	6
1/9		63	7
1/9		72	8
1/9		81	9
1/9		90	10

Introductio diuisionum per 11

1/11	de	11 est	1
1/11		22	2
1/11		33	3
1/11		44	4
1/11		55	5
1/11		66	6
1/11		77	7
1/11		88	8
1/11		99	9
1/11		110	10

Introductio diuisionum per

1/12	de	12 est	1
1/12		24	2
1/12		36	3
1/12		48	4
1/12		60	5
1/12		72	6
1/12		84	7
1/12		96	8
1/12		108	9
1/12		120	10

Introductio diuisionum per

1/13	de	13 est	1
1/13		26	2
1/13		39	3
1/13		52	4
1/13		65	5
1/13		78	6
1/13		91	7
1/13		104	8
1/13		117	9
1/13		130	10
1/13		143	11
1/13		156	12
1/13		169	13
1/13		182	14
1/13		195	15

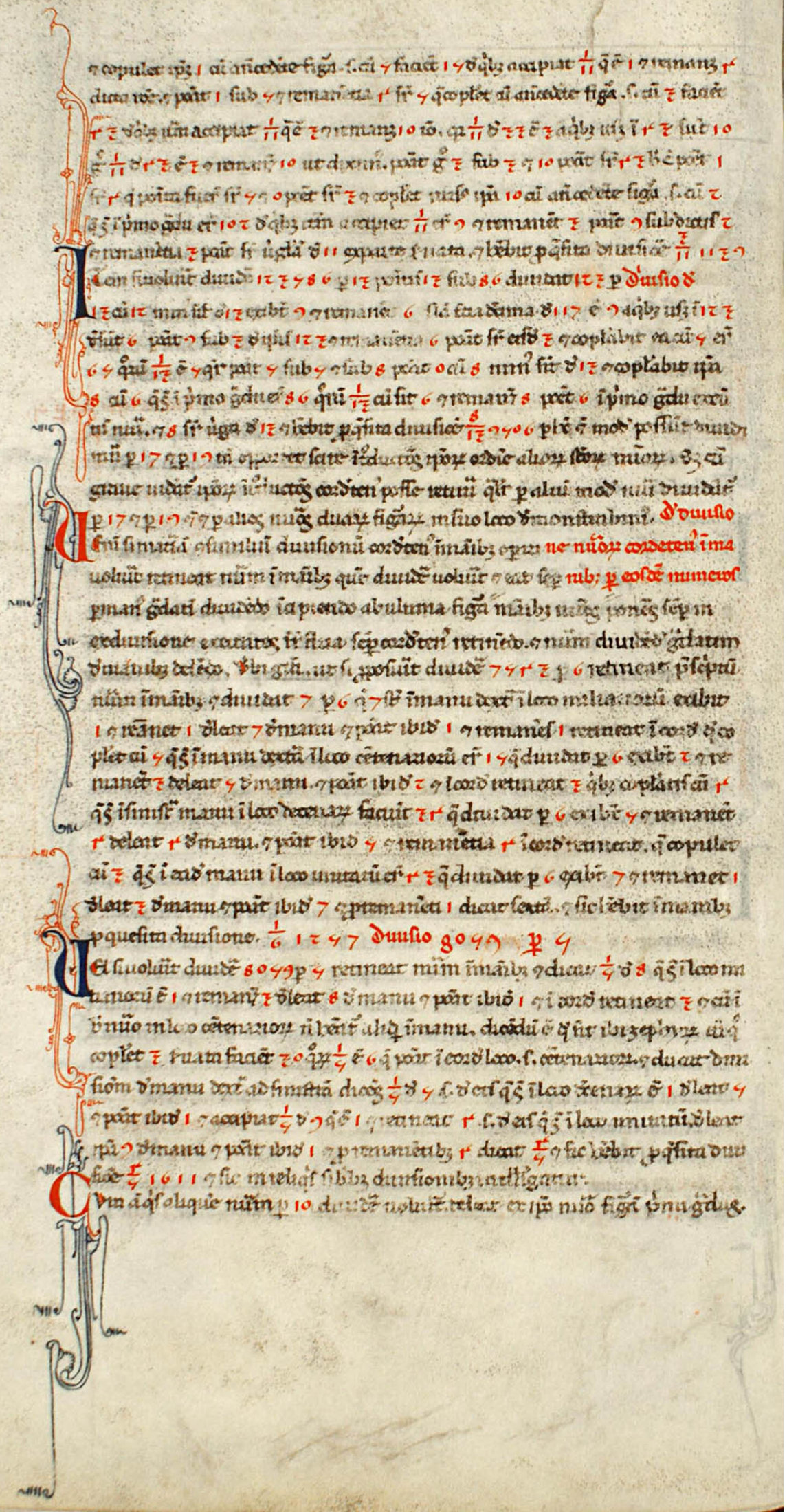
Regula uniuersalis d diuisione nūoꝝ p nūos primi gradus;

Dnos g̃ pcepts diuisoibz atq; ars firmata usu optime p̃cauitq; siqs uoluerit q̃z
ubz nūm ĉubz gd̃ q̃uelibz dator nuoꝝ. s. eozū q̃ z̃ abmano usq; ī̃cenariū diui
de. d̃scdit nūm itabla. ꝯ pait figm q̃ua figā nūm diuidẽ uoluit sub p̃mo gdu
rpi nū. ꝯ iapiat diuisiõm abultā figā nū. ꝯ diuidat eā si p̃sibile fuit p nūm
figẽ p̃cm nūs diuidẽ uoluit. ponq; diuisiõm ifen̄ itabla sub eod̃ ultimo gdu. ꝯ sia
liq̃d excdunsiẽ srfluit. pait rgz srfluū sr eãdẽ ultimā figā. ꝯ copulet rgz aī ꝯ seqm
figā. ꝯ diuidat eaz duas figas tanq̃m facietes nūm diuiz figaz. ꝯ pait diuisiõm
sub eod̃ seqnta figa. ꝯ supfluū si fuit sr rpā d̃scdit. Et sic sep̃ p̃cepto ordie supfluū
seqnta figẽ copulãdo. ꝯ nūm q̃ excdunsiẽ, puenit ponendo ꝯ supfluū supi d̃scdãdo
gdatī usq; ad p̃mā figā nūi ꝺuenit p̃cedo. Nam aī sepe euenit, q̃ figẽ iqbz nūi
diuidẽ maiozes ultimis figis rpoꝝ nuoꝝ exeunt. Tuc aī ñ ualeāt rpe p rpas di
uidu. mapiat diuisiõm ab ultimis. ꝯ a seqntibz figis. ꝯ diuidat eas p̃cepta nec co
pulatas. ꝯ diuisioes pait sub penultimis. ꝯ d̃supfluus uadat usq; ad finẽ ut pdiximus
operando, q̃nq; ñ fuit. diuidat tm rpā figā q̃ usq; supfluū ꝺuenit. q̃ copiam excedẽ. ꝯ si
rpā diuidẽ ñ potit. ĩo q; sit minor rpa p̃cm diuidẽ. pait sub rpa zephyrꝰ. ꝯ totā rpa
tanq̃m srfluū seqnta figẽ copiando ad nūgat. ꝯ sic debet q̃plibz diuisionū
Si uoluit diuidẽ ꝛ 6 ꝯ p ꝛ d̃scdit ꝛ iqda pte tabl̃e. ꝯ d̃sup fluus uadat (q̃nitatẽ
ugulã. ꝯ alia ꝛ pait sub ꝯ ꝯ iapiat diuidẽ ꝛ p ꝛ. s. ultimā figā diẽs. ½ d ꝛ ẽ 1 ꝛ
remanz 1 d̃scdit 1 sub alẽ ꝛ ꝯ 1 q̃ remanz d̃scdit supi ut ī pma d̃scpte ãnt. ꝯ rema
nẽte 1 copulatio aī 6 q̃ẽ uxta ultimā dictā figā facit 16 accipiat ½ d 16 q̃d ẽ 8 pait
q̃ 8 sub 6 añ positū 1 sub ꝛ ut mos d̃scpte ãnt. ꝯ aī nūc sit supfluus idiuisiõ d 16
diuidat ꝯ p ꝛ exibit ꝛ ꝯ remanz 1 d̃scdit ꝛ sub ꝯ ꝯ 1 q̃ remanz scdm sr posita ꝛ q̃ ex
parte aī ũgla fuat infimi. ꝯ aīt medietas unī integr. ꝯ aī rpm ½ d̃scdit nūm exeuntẽ
excdunsiẽ. s. 1 8 ꝛ ut iultima d̃scpte patet. Nã rupa ut supra sep̃ ponẽdus p integr. q̃
ut pus integr. quã rupa ꝓmmutari debet. Et notãd nus q; q̃n aliq̃s nūs diuisus ẽ p
aliquẽ nūm. Tuc ex mltãne diuisoꝝ inuenit̃ pueri diuisus nūs. Vt sipo. diui
dãt pt uenit 10. Cr si ualeam q; p 10 q̃ magis ẽ diuisu nūm facit. Simili si
multiplicabit ½ 1 8 ꝛ p ꝛ. s. exeuntẽ nūm pdiuisoẽ puenet ꝛ 6 ꝯ. s. nūs diuisus.
Tem si dat ꝛ 6 ꝯ p ꝛ diuidẽ uoluit d̃scdit ꝛ sub ꝯ ꝯ diuidat ꝛ p ꝛ exibit 1 q̃ pait
sub ꝛ ꝛ̃ diuidat 6 p ꝛ exibẽ ꝛ q̃ pait sub 6 ꝯ diuidat ꝯ p ꝛ exibit 1 ꝯ remanẽt ꝛ
pait 1 sub ꝯ ꝯ ꝛ sr ugla, d ꝛ exputa fuata ꝯ aī rpm pait nūm exeuntẽ excdunsiẽ
s. 1 ꝛ 1 ꝯ sic debet ½ ꝛ 1, pfecta diuisiõ ut d̃ ostenditur. Et notãd q; nuq; q̃diuidit meat
diuisus, ut diuidẽs ꝯ nūs q̃ diuidat meat diuidẽs, ut diuisor ꝯ nuq; qui puenit exdi
uisione meatum gradent ut exeuntes. **Diuisio 1 ꝛ 6 p ꝛ.**
Tem si uolum̃ q̃ diuidẽ 1 ꝛ 6 p ꝛ pait ꝛ sub 6 ꝯ diuidat 1 ꝛ p ꝛ aī ñ possit diuidẽ
1 q̃ ultimo gdu nūi exibit ꝛ ꝯ remanet 1 pait ꝛ sub ꝛ ꝯ remanẽs 1 pait sp̃end
ꝛ ꝯ copulet rgz 1 aī ꝛ q̃ añexa ꝛ in nūs ẽt 1 ꝛ sumat q̃rtã d 1 ꝛ q̃ ẽ ꝛ ꝯ remanẽt
ꝛ pait ꝛ ifra sub ꝛ ꝯ remanẽtia ꝛ supi q̃ copiãdo aī 6 facit ꝛ 6 q̃ diuidat p ꝛ
exibit 6 ꝯ remanẽt ꝛ pait 6 sub 6 ꝯ remanẽtia ꝛ pait sup̃ regulã d ꝛ exputa fuata

②	
1	
ꝛ 6 ꝯ	
1 8 ꝛ	
①	
ꝛ 6 ꝯ	
1 8	
②	
ꝛ 6 ꝯ	
1 8 ꝛ	
sūma diuisiois	
½ 1 8 ꝛ	

q̄ notāt duas ſſtras aīs integr̄ q̄ eſſles ḡ mediet̄ unī integr̄. aīs ipīs pāt nūs eccliē
eccliaē. ſ. ꝛ ꝛ o ⁊ ſic hēbūt ½ ꝛ ꝛ 6 ꝓſſita diuiſiē. Vbi gñ diuiſim ꝑmū ꝛ p
r q̄ ꝛ ēmniat ītro gdu. Q̄ ipſ ē cētenaria cogſcam. aī tū gdus ſit cētenarioꝝ. Si
uſſ ḡ nedeā cētenarus p r uenit cētenaria tā. ⁊ remanz unū cētenariū īdiuiſibile.
Q̄ ponūt ꝛ ītro gdu. ſ. īloco cētenariorū. ⁊ i q̄ ſunt ſupſtuī ponūt ſr 6 ⁊ ē dnoīe
cētū copulatumq̄ ipīs ⁊ aī r fiet ir q̄ ēmniat ſſo gdu. ſ. īloco decenaꝝ. Q̄ dnoīe
cētenaꝝ decenaꝝ ir q̄ſdiuiſim p r uenit ⁊ ⁊ ⁊ due dene ⁊ due dene remāſer in diuiſi
bilef q̄ſ ponūt ꝛ ſub r ⁊ ꝛ ſr r īloco unū ⁊ decenaꝝ ⁊ copulatumq̄ ipīs ꝛ aī 6
ꝑmi gd. Ecꝯū coplatē būū ꝛ 6 unitatef aī ipīs coplatō ēmniz īꝑmo gdu. ⁊ di
uiſim ipīs ꝛ 6 unitatef p r ⁊ uenit unitatef 6 ⁊ remāſer ꝛ Q̄ ponūt 6 in loco
unitatū ⁊ duo ponūt ſr ūgā ꝺ r ⁊ ſic iteꝝgat ꝺ reliq̄ſ ſiblis diuiſionib;
Tem ſi uolūt diuidē ⁊ r ꝛ p ⁊ pāt ⁊ ſub ⁊ ⁊ ducat ¼ ꝺ ⁊ ē i q̄ Diuiſio. ⁊ r ꝛ p ⁊.
pāt ſub ⁊ ⁊ ¼ ꝺ r ē o ⁊ remanēt r pāt o ſub r ⁊ remanētib; r copulet ipīs r
aī ꝛ ⁊ ducat ¼ ꝺ r ꝛ ſr 8 ⁊ remanē ipīs ꝛ pāt 8 ſub ꝛ ⁊ accipiat ꝑmū ꝺ ipīs ꝛ
coplatūſ aī ⁊ .ſ. ꝺ ꝛ ⁊ exibī 7 ⁊ remanēt r pāt 7 ſub ⁊ ⁊ r ſr ūgulā ꝺ ⁊ exp̄ite
ꝓuatis ⁊ aīs pāt nūs eccliarū eccliaē Diuiſio ⁊ o o o ꝛ p 7
Tem ſi uolūt diuidē ⁊ o o o p 7 pāt 7 ſub ꝑmo zephyro. ⁊ diuidat ⁊ p 7 exibit 1
⁊ remanēt ꝛ pāt ḡ 1 ſub ⁊ ⁊ ꝛ ꝺ ſr. q̄bz coplatūſ aī o q̄ ē ſec ⁊ facit ꝛ o q̄ diuidat
p 7 exibit ꝛ ⁊ remanēt 6 pāt ꝛ ſub illo zephyro. ⁊ 6 ꝺ ſr q̄bz coplatūſ aī ſeq̄nta ze
phyro. facit 6 o q̄ diuidat p 7 exibit 8 ⁊ remanēt r pāt 8 ſub illo zephyro o ꝺ ſr
pāt r q̄bz coplatūſ aī zephyro ꝑmi gd. facit r o q̄ diuidat p 7 exibit ⁊ ⁊ remanēt
⁊ pāt ⁊ ſub ipō o ⁊ remanētia ⁊ pāt ſr ūgulā ꝺ 7 exp̄ite ꝺ ſq̄ra. ⁊ aī ipīs
ponūt nūs eccliarū eccliaē. Diuiſio 10000 ꝛ p 8
Tem ſi uolūt diuidē 10000 p 8 pāt 8 ſub o ꝑmi gdus ⁊ ducat ⅛ ꝺ 10 ē 1 ⁊ rema
nēt ꝛ pāt 1 ſub o ītū gdus. ⁊ ꝺ ſr pāt r ⁊ accipiat ⅛ ꝺ r o q̄ ē ⁊ q̄ pāt ſub ſcō
gdu. ⁊ ut ꝯpleat ordo gduū eccliarū nūs. ponēdū ē o ſub o ꝑmū gdus ut i hac
ꝯſq̄tione ꝯmutr. Diuiſio 1 2 0 0 ⁊ 7 ꝛ p 9
Tem ſi 1 2 0 0 ⁊ 7 p 9 diuidē uolūt ꝺ ſcdar ⁊ ſub 7 ⁊ ducat ⅕ ꝺ 1 2 ē 1 ⁊ remanz ⁊ pāt
1 ſub ⁊ ⁊ ſupſ ⁊ ⅕ ꝺ ⁊ o ē ⁊ ⁊ remanēt ⁊ pāt ⁊ ſub o q̄rtū gdus. ⁊ ꝺ ſr pāt ⁊ ⁊
ītū accipiat ⅕ ꝺ ⁊ o q̄ ē ⁊ ⁊ remanēt ⁊ pāt ⁊ ſub o ītū gdus. ⁊ ⁊ pāt ſr ipīs o itz
⁊ ⅕ ꝺ ⁊ ⁊ ē ⁊ ⁊ remanēt 6 pāt ⁊ ſub ⁊ ⁊ ſupſ 6 ⁊ ⅕ ꝺ 6 7 ē 7 ⁊ remanēt r pāt 7
ſub 7 ⁊ remanētia r pāt ſr ūgulā ꝺ ⁊ exp̄ite ꝺ ſq̄ra. Et ita ſi ſim ꝓſq̄tū diuidē
duo diuidē diuidē ſciūt. ⁊ aliq̄bz ſiblis diuiſionib; nūq̄ patitūr diuiſe. ⁊ ꝓpēd medū ē
nūs diuidi poſſūt p 11 ⁊ p ⁊ ⁊ m oportet ꝑmū ſcire ꝛductas ipoz ordinē aliozq̄ ſtoꝝ.
ut ītrabit diuiſionū ſupſ ⁊ manēt. Sūa ⁊ducto ꝺ 11 aſcēdit ab ano uſq; i decas 11 ſ. i
11 0 Et ⁊ducto ꝺ 1 ⁊ aſcēdit ab 1 uſq; in decas 1 ⁊ ſ. 1 ⁊ o Diuiſione nūoꝝ p 11
Poſq̄dē dicti ⁊ducōib; ⁊ uolūt q̄ſ diuidē 1 2 ⁊ ⁊ ⁊ p 11 pāt 11 ſub ⁊ ⁊ Et accipiat
½1 ꝺ 1 2 q̄ſ i capite diuidēdi nali q̄ ē 1 ⁊ remanz 1 ſo ⁊ ⅟11 ꝺ 11 ē 1 ſic iſtis ⁊ducti ſtēt oſtē
dit. ⁊ ⅟11 ꝺ 1 2 ē 1 ⁊ remanz 1 [illegible] ſub ⁊ ꝺ ſupſ ⁊ ⁊ remanēt 1 pāt ſr ⁊

	⁊ r
1	0 0 0 0
	8
1	2 ⁊ 0



et copulet ipsum 1 cum antecedente figura. s. cum 4 faciet 14 de quibus accipiat $\frac{1}{11}$ que est 1 et remanet 4
dicta ratione et ponat 1 sub 4 et remanentia 4 sit 4 que copulet cum antecedente figura. s. cum 2 faciet
4 2 de quibus iterum accipiat $\frac{1}{11}$ que est 2 et remanet 10 ratio. quia $\frac{1}{11}$ de 2 2 est 2 a quibus usque in 4 2 sunt 10
ergo $\frac{1}{11}$ de 4 2 est 2 et remanet 10 ut diximus. ponat ergo 2 sub 2 et 10 ponat sit 4 2 hec est ponat 1
sit 4 que posita fuerit sit 4 et 0 ponet sit 2 et copulet ipsum 10 cum antecedente figura. s. cum 2
que est in primo gradu erit 10 2 de quibus iterum accipiet $\frac{1}{11}$ erit 9 et remanet 2 ponat 9 sub dictis 2
et remanentia 2 ponat sit ut gratia de 11 exparte servata et habebit per quesita divisionem $\frac{2}{11}$ 11 2 9
Item si voluerit dividere 12 2 4 8 6 per 12 positis 12 sub 8 6 dividat 12 2 per divisio de
12 cum 12 minus sit de 12 exibit 9 et remanet 6 sicut facta decima de 117 est 9 a quibus usque in 12 2
versus 6 ponat 9 sub 2 de ipsis 12 2 et remanentia 6 ponat sit eisdem 2 et copulabit ea cum 4 erit
6 4 quorum $\frac{1}{12}$ est 4 quare ponat 4 sub 4 et sub 8 ponat 0 cum 8 minus sit de 12 et copulabit ipsa
8 cum 6 que est in primo gradu erit 8 6 quorum $\frac{1}{12}$ cum sit 6 et remanet 8 ponet 6 in primo gradu exeun-
tis numeri. et 8 sit ut gratia de 12 et habebit per quesita divisionem $\frac{8}{12}$ 9 4 0 6 per hoc quod modo possunt dividi
numeri per 17 et per 19 tamen oportet scire introductionem ipsorum ordine aliorum sanctorum minorum. Sed cum
grave videatur ipsorum introductionem corderten posse retinere qualiter per alium modum numeri dividantur
per 17 et per 19 et per alios numeros duarum figurarum in suo loco demonstrabimus. De divisio
Enim si materiam et similium divisionum corderten in manibus operari ne numerorum corderten in ma
voluerit retineat numerum in manibus quem dividere voluerit et eat semper nubis per eosdem numeros
per manus gradatim dividendo incipiendo ab ultima figura manibus numeros ponens semper in
ex divisione executos in fine semper corderten retinendo. et numerum dividendum gradatim
de manibus delendo. Ubi gratia. ut si proposuerit dividere 7 4 4 2 per 6 retineat prescriptum
numerum in manibus et dividat 7 per 6 quod 7 sit in manu dextra in loco miliariorum exibit
1 et remanet 1 deleat 7 de manu et ponat ibidem 1 et remanens 1 retineat in corde quod co-
pulet cum 4 que est in manu dextra in loco centenariorum erit 14 que dividat per 6 exibit 2 et re-
manet 2 deleat 4 de manu. et ponat ibidem 2 et in corde retineat 2 quibus copulatis cum 4
que est in sinistra manu in loco decenarum faciunt 24 que dividat per 6 exibit 4 et remanet
4 deleat 4 de manu. et ponat ibidem 4 et remanentia 4 in corde retineat. que copulet
cum 2 que est in eadem manu in loco unitatum erit 4 2 que dividat per 6 exibit 7 et remanet 1
deleat 2 de manu et ponat ibidem 7 et pro remanenti 1 dicat sextam. et sic habebit in manibus
per quesita divisione. $\frac{1}{6}$ 1 2 4 7 Divisio 8 0 4 9 per 4
Et si voluerit dividere 8 0 4 9 per 4 retineat numerum in manibus et dicat $\frac{1}{4}$ de 8 que est in loco mi-
liariorum est 1 et remanet 2 deleat 8 de manu et ponat ibidem 1 et in corde retineat 2 et cum in
hoc numero in loco centenariorum non habeatur aliquid in manu. dicendum est quod sit ibi zephyrum cum quo
copulet 2 servata faciet 20 quorum $\frac{1}{4}$ est 6 que ponat in corde loco. s. centenariorum. et ducat divi-
sionem de manu dextra ad sinistram dicens $\frac{1}{4}$ de 4 s. de eis que est in loco decenarum est 1 deleat 4
et ponat ibidem 1 et accipiat $\frac{1}{4}$ de 9 que est 1 et retineat 4 s. de eis que est in loco unitatum deleat
ipsa 9 de manu et ponat ibidem 1 et pro remanentibus 4 dicat $\frac{4}{4}$ et sic habebit per quesita divi-
sione $\frac{4}{4}$ 1 6 1 1 et sic in reliquis similibus divisionibus intelligatur.
Cum autem quis aliquem numerum per 10 dividere voluerit deleat ex ipso numero figuram primum gradus.

11r

7 pāt cā sr̄ q̄dā 10 p̄tiū ep̄āt cā ūgla. 7 añ ip̄ā pāt nūm q̄ remāsit p̄ deceōm
cē p̄mo figē. 7 sic ponit. q̄libz nūz p 10 dundē. Vbi gā. ut si uoluit dundē 167
p 10 deut ep̄ūl figā p̄m gdul. s. 7 7 pāt ea sr̄ q̄dā 10 ut dixim̄ ep̄āt q̄ nata
cā ūgla 7 añ ip̄ā pāt remanētē nūz. s. 16 7 sic bēb p q̄stm dunsiē 7/10 16 Et si
167 z p 10 dundē uoluit deleti z ỽ 167 z remanē p q̄stm dunsiē z/10 167 Jnapūt
Dūsiones numerorū p nūos ī ypsos sr̄ gd.
Pōnū q̄dā ḡ ī ypōsi. 7 ḡ illi q̄ az sm etiā
ī geometā p̄m applānt. Jō q. anulī nūs in medijs exsistūbz ip̄i pē quā ab
unitate mētiūt. t nūāt. Aunbz ip̄is halsam. applānt. Circa cēsi cānō. nos ā
sm regulē eos applām̄ eqbz ulli q̄ ḡ mīa cēū. īqdā tabla ī sequētib; delebāt. Alios
uo p̄mos q̄ ḡ ult cēū p̄ inuentione docebo. Reliq uo ypōsi. t ep̄ipedi. 1. sr̄fīales.
ap tūlio geometrie uelid applānt. Jō q. ypōnūt exemplāriē aliq nūos. ut
duodeci q̄ ypōnūt exemplārē binarii ī. 6 t ternarii ī nos ā ip̄os reglāres nūos ap
plām̄. Et ē dundēdi doctīa p̄ p̄mos 7 ypōsos nō sit eadē. Jn p̄mis. s. p eos q̄ ḡ sm
regulē. j. cēū q̄slibz nūos ip̄i maiores exsistēs dupliē ostēdam.

Tabla nūor halsam.

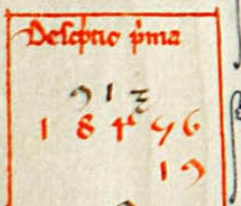
1 1	z 7	6 7
1 z	4 1	7 1
1 7	4 z	7 z
1 9	4 7	7 9
z z	5 z	8 z
z 9	5 9	8 9
z 1	6 1	9 7

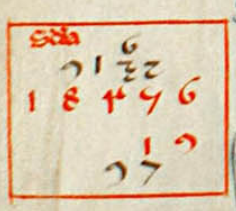
Vnaq̄ quēlibz nūm paliq̄ p̄sēptorū q̄ sit sm regla. q̄s dundē uoluit. sēdm nūm ī
tabula. 7 sub ip̄o pāt ip̄z p̄mū nūz p q̄. dundē uoluit. ecl aūt figā simulē gdū sub
sili. 7 uidet si due ultime nūi dundēdi figē maiorē nūm faciēt. ut ēqlē. ut m
noziē ip̄o p̄mo nūē paria nūs dundēt. Et si maiozē l ēqlē nūm fecerit. īa pūd
ē ultim̄ gdus. ecl nūs sub sequēti ultimo gdu dundēdi nūi. Vbi sub pēultīa
7 pāt ubi ar nūo ualē figā. q̄ multa p̄ducit nūm. faciat nūm duaz
figāz ultimaz qdlibz. ut sē. Et tē milēs ip̄i pultimā figā. ip̄i p̄mū nūi. s. du
uisēs. 7 excelsē sūmā ỽ ultimā figā ecl. Et si aliq sr̄ būn duūt dicat babū
dimā sr̄ ip̄i figā. Et multiplicādo eid p̄ta figā p p̄mā eid p̄m nūi. s. duūsoēs. 7 multa
rōm ỽ coplatē dē sr̄ babūdātio. 7 penultē figē ecl. 7 sic dui si fuit nūs ỽ
az figāz. Vbi ē q̄ sit ālis ỽ 10 pāt p̄mū gdū ip̄i nūi sr̄ penultimā figā. 7 ul
timū sr̄ ultimā. Dicā p̄mi gdi ip̄z sr̄fluū ecl. s. nūm 10 pāt figā ip̄i sr̄ pen
timā. 7 coplet ip̄z sr̄fluū ai ētia figā abultā. Et subtā ētia figā pāt ad ubitō ta
lē figā. q̄ multa p eid duūsoē faciat nūm dē coplatōg. ut sem q̄ ad ubitum
q̄li ematē hēat ī sequētib; duūsionib; sm dictam ip̄ā ostēdē. penultio. Et tē milēs
ip̄i p̄ta figā sub tua. pultimā duūsoēs. 7 sūmā ecl s. possibilē fuit. ultimo
gdu dicti sr̄ babūdātis 7 nullū nūi. Sm ā ecl ev ei ỽ coplatē ultē 7 sequēs
7 sr̄fluū pāt sr̄ eid gdū. Et milēs nūm ip̄z p p̄mā duūsoēs. 7 sūmā ecl nec ỽ ir
manēti nūo. 7 sr̄fluū pāt ỽ sr̄. Et sic sp coplādo sr̄fluā ai figūl q gd. sequēs
7 sub ip̄is gdib; figāl poūcdo ad ubitō. 7 sm ip̄sp ordinē multādo ultās ad finē nūi
duarū predē studiū. Vīm ai sepe euenit q̄ ỽ coplatē sr̄fluū ad añcedēs figē nūs
duūsoēs ecl nō potūt. ē scīēd' eūt sepbyus sub eid añcedēte figā. 7 coplabit ois
s. añcedēti. t sequēti. 7 sr̄fluo alii. t sequēti añcedēte figā. 7 sub ea pāt illā figē
q̄ multa p duūsoēs nūi faciat nūm dātē illaz ei figāz. s. ip̄az q̄ ecl. nec coplā
tē sr̄ fīlabūdātis figē. 7 duaz añcedēti. t sequēti figāz. Vñ si due ultime figē

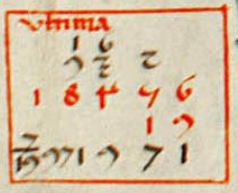
dnus dñs nr̃ mirabile nom̃ suū dum sero ut pdicat̃ fr̃es in capitlo cū ceteris nr̃is sub tali figura adunata. et una q̃libz nr̃oz p̃decessoz primos huius duodē posuit. Et ut in dictis libris q̃ducta sua mentis gaudia ea ai nr̃is ostendam̃. Diuisio d 1 8 4 5 6 p 17.

Sicut voluit dominus 1 8 4 5 6 p 17 dicatur 17 sub 5 6 d 1 8 4 5 6 et accipiat 1/17 d 1 8 q̃s ultimus duodecim figat duodecim nr̃os q̃ 1 et remanent 17 pone 1 sub 8 d ipis 1 8 et remanẽs 1 pone sic 8 ut in prima descriptione ostendit. Et coplet ipe 1 ai antecedens figa. s. ai 4 sua aet 4 q 4 ai nr̃is sic duodecim nr̃os. s. d 17 ponit 0 sub ipis 4 .s. an̄ posta 1 sub 8 et coplab ipa 4 ai antecedens figa. s. ai 4 facit 4 4 et ponit unaq; sub ducta 4 tale figi arbitrio. q p 17 milia una faciat sexies dñs 4 4 nr̃os ut ipe arbitr̃ exacte beatus audax d duodecim nr̃os. s. d 17 an decennio nr̃os primo fr̃es. e e primo 10 duodecim g dñs 4 4 p 10 d sic fit d 10 relinq̃t prima figa. s. zephyr remanebit 4 d ipis 10 relinq̃t ut prima figa d 4 4. s. 4 remanebit 4 q duodecim p dña 4 exibit 7 et tale debz e figa qua debz poni sub 4 4 1 apli. s. 8 d augustus qui 17 mun̄ g d 10 un̄ maior pars e 1/17 d 4 4 q 1/10 dñs unaq; 8 sub 4 d 4 4 4 ti unaq; oppz et milez ipis 8 p 17 et ter ter milies mille ipe 4 4 d 4 4 q sic fit. mlb unaq; 8 pultima figa d 17. s. primi ei 8 q ex hac d 4 4 remanebit. 6 q pater sic 4 d 4 4 et coplet ipa 6 ai an̄ antecedens 4 faciet 6 4 d q̃libz exactus milies mille exies 8 talia figa d 17. s. i 7 q milies mille 6 4 6 remani et ut remanz d 4 4 et exacta in milies mille d 8 i 17 ubi sua d Desepno ostendit. pater unaq; sic 4 et coplet ipa e an̄ antecedens figa. s. ai 6 faciet et 6 4 pater sub 6 jam tale figa q milia p 17 faciat ap q pater d 4 6 Dni ut sanct q sic illa figa. reliq̃t 6 d et 6 4 remanentia et dunduat p 7 sue ania sanctam. d 4 4 exibit 1/2 4 q pater 4 hoc e apli d 1/2 4 sub 6 hoc e ipmo gdu exies nr̃os. et milies mille ipa 4 p 1 d 17. s. p ultima figa ipius faciat 4 q exactus d et q pater sic ipis et 4 coplab ipa 4 ai antecedens 6 .s. ai q̃libz ania coplauit et faciet 4 6 d q̃libz exactus milies mille d ales 4 i 7 hoc e 7 4 remanebit 11 remanebit q pater sic 17 exquire fuerat sub digna. et exactus nr̃os. s. 1 0 8 4 pone an̄ ipa. et sic hebis 11/17 1 0 8 4 q̃stion dumsicet ut mihi ultima Desepcione ostendat.

Verbis finalibus 1 8 4 5 6 p 17 dum dñs voluit/ dicatur 17 sub 4 6 d 1 8 4 5 6 Et pone sub 4 d 1 8 4 tale figa q milia i 17 faciat sic ipa 1 8 4 q q̃ sic/ cod̃ m q d 17 dixim̃ exaltat. hoc e q relinq̃t 4 d ipis 1 8 4 remanẽs 18 q duodecim p 7 exibit 7 et tale debz e figura ponenda. s. 7 q pater 7 sub 4 .s. subtilissimo gdu. et milies 7 p 1 d 17 et 7 q exactus d 18 remanẽs 7 q pater sic 8 et coplet ipa 7 ai 4 faciet 7 4 d q̃libz exactus milies mille d ales 7 17 d 17 q̃ 8 1 remanẽs 1 12 pater ipa 12 sic 7 4. s. 1 sic 7 12 sic 4 ut i prima Desepcione ostenditur. Et coplab 12 ai an̄ antecedens figa. s. ai 4 et 1 12 4 Et pater sub 4 tale figa q milia p 17 faciat 12 4 ut sic exies 7 q̃si reliq̃t 4 d 12 4 remanebit 12 q̃ sic p 7 duodecim exibit 6 et apli. un̄ pater 7 sub 4 et milies 7 p 1 d 17 et 7 q exactus d 12 remanẽs 6 q pater sic 12 d 12 et coplab 6 ai 4 faciet 6 4 d q̃libz exactus milies mille d 7 i 7. s. 6 12 remanebit 12 q pcel sic 4 ut i Desepcione ostenditur. et coplab 12 ai an̄ antecedens figa. s. ai 6 q q̃ i primo gdu faciet 12 6 q duodecim p 17 ut ita dicam̃ exibit 1 et remanz 7 pone 1 i primo gdu exactus nr̃os. s. sub 6 et remanentia 7 pater sic digna d 17 q debz explere suam. et exactus







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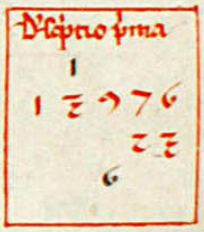
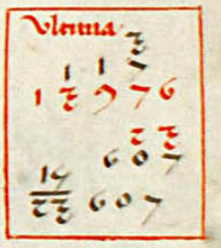
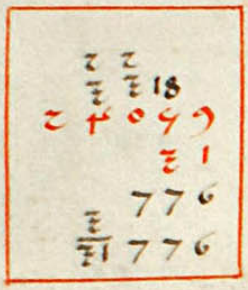
mim. s 9 7 1 pcēt añ ipā ūglā. 7 sic hēbit. pāsita diuisiē 7/19 9 7 1 ū i hac ultīa dēpte
Cmōstrata q̄d matīa ī hñdo arbitū ī ponēde figāt aī p 17 7 p 19 nuīq; diuidim. Posteā.
Sūc uō ostēdm q̄li: hūc arbitū ī ponēdis figīs aī p reliq̄s casam q̄z mīc cētū diuidē uo
luim. Et h ē mod. q sic aī diuidim p 17 ut p 19 accipim medietatē exhuidēdis nuīq
p̄ma figā relicta. 7 q̄nq; uno āpli. ō q 17 7 19 mm q̄ d 7 o ū p̄dcam. ita aī diuidm
p 7 7 accipiem medietatē. t q̄nq uno mm. q 7 7 pl q̄ d 7 o 7 sic aī diuidm p 7 9 debem
accipe tīā 7 q̄nq 1 pl. ō q 7 9 mm q̄ d 7 o q̄bz ꝑtera q̄ q̄ alius decima ut. Et aī diuidm
p 7 1 debem accipe tīā. 7 q̄nq; uno mm. Et sic eod o aī diuidm p 7 7 debem accipe q̄r
tā 7 q̄nq 1 pl. Et aī p 1 ut p 7 debem accipe q̄rtā. t q̄nq; mm. Et aī diuidm p
7 7 debem accipe q̄ntā. 7 q̄nq 1 pl. Et aī p 7 7 ā tā. 7 q̄nq 1 mm. 7 aī p 9 septā t
pl. Et aī p 6 1 septā. t uno mm. Cū p 6 7 septīā. t uno pl. Cū p 7 1 t p 7 7 septīāz
t uno mm. Et aī p 9 debem accipe octauā. t pl. Et aī p 8 7 octauā t mm. Et aī p
8 9 debem accipe nonā. t pl. Et aī p 9 7 diuidm. debem accipe decimā diuidēdo nu
uōz una figā relicta. t q̄nq uno pl. Vñ aī q̄l diuidit q̄libz nuīq; p̄cēptoz
nuōrū. 7 ig̃rauit uīr debeat dare pl t mm q̄ dicam. patēt ipā pātē q̄a supi dīctū
7 mīq; ipā pātē p nuīq diuisōe. 7 si m̄cātō maior fuit diuidēdi nuī. det unū mm.
Et si minor uīr q̄m debeat sic m̄cātō det unū pl. 7 sic potīt q̄libz nuīq p̄dcaz nuīq
diuidē. Tm nos inq̄rēdā diuisionbz hui declarabim. Diuisio d 1 7 9 7 6 p 7 7
Tm si 1 7 9 7 6 p 7 7 q̄l diuidē uoluit pātē 7 7 sub 7 6 Et aī 7 7 sit pl q̄a 1 7 si nō
diuaz ultīaz figāz diuidēdi nuī. accipiēdo q̄ q̄ ipe ultīe figē. q̄a nūl ē 1 7 9 Vnd
hapiendo ē ultīa q̄d o remanet nuī sub ei 9 patēt in 6 q̄ sic inuenit. p matīa dei arbi
trū. si q̄ debem reliq̄e p̄ma figā d 1 7 9 si remanā 1 7 q debem diuidē p 7 q 7 7 p̄ ē 7 o
q̄ alio decimato nuō q̄abit 6 q semel. Vñ aī debem ponē mm. aī 7 7 sit pl 7 o reliq̄m
ꝑ tam. q̄ p̄dcm 6 sub 9 ā diuisā 9 mīq; ipa 6 p 7 7 ē 7 1 7 q̄ cētur d 1 7 remanz 1
q̄ p̄cat si 7 7 7 cop̄ ipz aī 9 ē 1 9 Et mīq 6 p 7 7 q̄s 1 7 7 aī 18 q̄ cētur d 1 9 remanz 1
q̄ p̄cat si 9 ut i p̄ma dēpte dicit. Et cop̄ ipz 1 aī 7 q̄ antedict aī inuō ē 17 7 aī ipi
17 mm sit q̄ 7 7 ponēd 6 sepbz sub ipa 7 7 6 q̄s i p̄mo gradu nuī q̄ aī ipi 17 cop̄ip
dicit 17 6 q̄ p̄ 6 pātē sub dcā 6 tale figā q mīcatu i 7 7 sucat sē 17 6 ētoz 7 p̄cipat
rō. b mm mediatē d 17 mīq; unaz ipa 7 p 7 7 q̄s 1 7 7 ē 1 7 q̄ cētur d 17 remanz
7 7 q̄ p̄cat si 7 7 cop̄ ipa aī 6 p̄mo gradu aī 7 6 q̄nq; ēdē mīcātū d 7 7 7 remanz
1 9 q̄ p̄cat si ūgla d 7 7 expectare tuam ut i hac ultīa dēpte dicit. Pbatio hē diuisōis
Cū si p̄cipia diuisiē p̄pīa nouenaria p̄mo uoluīt accipiat pela d 1 7 9 7 6 q̄s 8 et
duc aī cpūte. Et nām accipiat pela ēdem aī nuī s d 6 0 7 q̄s 1 7 mīq; aī p pela d 7 7
q̄s 9 et 7 o q̄bz accipiat pela. q̄s 7 addare aī aī 1 9 q̄s si ūglaz d 7 7 et 17 q̄t pela
7 8 uacua sit expātē tuam. Vna gīa q̄m ēdem diuisōe ducto i ēdem nuīq; q̄ uel di
uisi nūl. Et si mīcatu pīa diuisoz p pīa ēdem aī mīc p pīa diuisi nuī. q ēdem
nuō p 7 7 remanet 1 9 q̄z ēdem d 1 7 9 7 6 remanz 1 7 9 6 1 q̄z diuisi p 7 7 uenit
6 0 7 Et ēdem aī d 7 7 i 6 0 7 q uenit 1 7 9 6 1 Et si mīcatē pīa d 6 0 7 q ēt 9 pīa d
7 7 q̄ē 9 uenit 7 o quoz pīa sit ē pīa d 1 7 9 6 1 q̄z adhuc pīa d 1 9 q̄ sit 7. q̄ē







tenuit 8 ſ. p'mi d' 1 ℥ 9 7 6 et hoc uolut dñ oſtitare. Poſſuit e' mlt'aratꝫ ad dict'
eccl'. mmutꝫ. ſeu duntaxꝫ mũꝫ. alit' paliaſ q̃ſdã pẽſat, p'mu. ſ. p eã d' 7 9 d' oĩbꝫ
mũſ alſ̃ cr'ũbꝫ. ut p 11 ut' p 1 ℥ 9 d' m'cepꝫ. Cuã decim̃ ſm q̃ nob' uidet' ꝯgruũ i
ſeq̃nt'ꝫ dñoſtrabim̃

Tenuit uolut' dunedẽ t'r' o 9 9 p ℥ 1 d' ſ'dat ℥ 1 ſub t'r' 4 9 9 p'tũ ſub zeph'. 7 ĩo q̃ ℥
ẽ an ℥ o 9 ḡ pl'. vñ ſi accepim̃ ½ d' t'r'. ſ. eccta p'ma ſigã d' t'r' o lebm̃ p'tia p'te 8 q
ẽ pl'q̃a 7 vñ p'm̃ ut dixim̃ 7 ſub zeph'. 9 ſm pl'q̃ũ eadẽ mlt'z ũ 7 p ℥ d' 1 et
℥ 1 q̃ eſtat d' t'r' remanẽt ℥ q̃ p'tũ ſr' r' 9 mlt'z ead' 7 p 1 d' 1 et 7 q̃ eſtat d' ℥ o rema
nẽt ℥ q̃ p'tũ ſr' ℥ o 9 dñpnz ũ ℥ ſuuule. t' ſuũ uule eaſ i eccl'iam p'dict'. Joẽ capl'
ũ ℥ ei 9 et ℥ 9 9 p'tũ nũ pl'q̃ta tẽ 7 ſub 9 ſ. mũ ẽtia p'te d' ℥ 9 mlt'z ũ p ℥
et 1 q̃ eſtat d' ℥ remanẽt p'te ſr' ℥ 9 dñpnz ũ ℥ 9 capl'o ũ eã 9 tñcuũt
℥ 9 ſeq̃ intligat' añoꝛ dñuũ eã oſeq̃ntibꝫ coplãtꝫ. 9 mlt'z ead' 7 p 1 et 7 q̃ eſtat
d' ℥ 9 remanẽ 18 p'tũ ũ ſr' ℥ 9 dñpnz ũ ℥ 9 poſt h' accipiat ½ d' 18 ſtãtẽ et 6
vñ p'tũ 6 ſub 9 7 ſub 1 d' 1 q̃bꝫ p'tũ. mlt'z ũ p ℥ d' 1 et 18 p'q̃ dñpnz ſr' p'tũ 18
9 mlt'z ead' 6 p 1 et 6 q̃ eſtat d' 9 remanẽ ℥ q̃ p'tũ ſr' ũglã d' 1 capt'e d' ſcpt'm. Et
ſic ſẽ p'q̃ſita duntaxat ℥ 1 7 76 ut i hac d' ſcpt'ã dixit. Volo d' noſtrare uꝫ h' modꝫ duu
dẽ ꝯpuenat. poſſum̃ q̃d 7 ſub tuto gdu nũ duudẽdu q̃ mlt'aum̃ p ℥ q̃ ſ i ultio g'.
duuſcat. 7 occupãt ſm g'. ei ſũt ſub ſo g'. duudẽdi nũ. 7 excipiũ mlt'ãt puer nũ ẽ
nunãſ i q̃rto g'. q' ttí gd' q̃libẽt q̃ gdu. mlt'at tuũ gdũ tac ab ipo q̃ mlt'at t' hac
nũm tñnãt' ipo. Ita q̃rt' gd'. tuto a ſo. Et ĩo excipiam mlt'ãt d' 7 i ℥ ſ. ℥ 1 d' t' q̃
tñnãt' i q̃rto g'. 7 poſſum̃ ℥ ſr' eũ d' q̃rũ gdũ. ſ. ſr' r' 7 intlligam̃ coplãtꝫ ℥ eã o
q̃ ẽ i tuto gdu nũ duudẽdu q̃ coplãtꝫ ẽ ℥ o 7 mlt'am̃ ruꝫ ead' 7 p 1 q̃ ẽ i ipo gdu du
uſcat. 9 q̃ hac mlt'atꝫ mlt'am̃ tuũ gdũ p p'mũ q̃ ẽ id q̃ mlt'at p'mũ p tuum.
Et ĩo mlt'z d' 7 i ſ. 7 excipiam d' ℥ o q̃ ℥ o tñnãt' i tuo gdu. q' ec mlt'ãt tuũ gdus
i p'mũ. t' p'mũ ſtuũ, pueꝛi nũſ tuũ gd'. t' tñnãſ i ipo gdu. 7 poſſum̃ ℥ ſr' ℥ o t' hac
coꝛ. 7 coplãum̃ ipũ ℥ ei 9 q̃ ſ i ſo gdu. 7 poſſum̃ ℥ 9 q̃ tñnãt' i ſo gdu. 7 poſſum̃
ſo gdu alia 7 q̃ mlt'am̃ tũ p ℥ duuſcat. h' ẽ ſm gdũ p'm ecꝫ mlt'atꝫ, gruent
nũſ tuũ gd'. t' tñnãſ i ipo. 7 ĩo excipiam ℥ 1 d' ℥ ei alio tñnãt' i tuo gdu. 7 q̃ to
mãſeꝛ poſſum̃ ſr' ℥ 7 intlligam̃ coplatõy eoꝝ ei 9 ſeq̃ntibꝫ. q̃ coplatꝫ ẽ ℥ 9 ẽ
nunãt' i ſo gdu. q̃bꝫ excipiam̃ mlt'õy d' 7 i 1. ſ. ſr' gd' i p'mũ ecꝫ mlt'atꝫ, gruent
nũſ ſr' gd'. t' tñnãſ i ipo remãnt 18 i tuſ gdibꝫ. mq̃bꝫ ſ ℥ 9 ſ. 1 i tuto gdu. 9 8 m
ſo 9 coplãum̃ ipũ 18 ei 9 p'mu gd' fuer' 18 9 poſſum̃ 6 i p'mo g'. excũ ſr'. nũ.
7 mlt'aum̃ ea p ℥ ſ. p'mũ g'. p ſm ecꝫ mlt'atꝫ, pueꝛi nũſ tñnãſ i ſo gdu. q̃
mlt'atꝫ fuit 18 p q̃bꝫ dlen tcum̃ ſuꝑſtita 18 ei tñnãt' i ſo g'. 7 mlt'aum̃ ead' 6
p 1 7 fuer' 6 i ipo g'. q̃ excipiam̃ d' 9 q̃ ſ i eod' g'. remanẽt ℥ q̃bꝫ duuſcat p ℥ 1 p'mum
℥ 1 7 ſic hũm̃ ℥ 1 7 7 6 9 ſm h' mltiplicat' in ſimulibꝫ duuſcãdꝫ. Ita ſi plãte d'
alueũ ſ p'mu p'ſeꝛa d' 7 coplãt' aqua. accipiat p'ſeꝛ p' d' t' 4 9 9 h' ſ ſuꝑfluum
ad mũſ 7 duuſcãdꝫ ſ fluũ ſic eã accipiẽd. ducat' d' ⅐ d' t' remanẽt ℥ d' ℥ o eãdo. ſ. copu
lãdo. remanẽt ℥ d' t' 9 remanẽt t' d' 9 remanẽt o q̃ſmo ſ fluo. q' hãt p'ſeꝛa eadẽ

mꝫ accipiat p̄la d' 7 7 6 q̄ꝫ 6 ⁊ mlēz ip̄a p̄p̄la d'z 1 q̄ꝫ sub ugla. b' ē p̄z ēt 1 s q̄ duu
dat p̄z remanēt ⁊ q̄ addat aī z q̄ꝫ sup ugla z d'z 1 ēt 7 q̄ dundat p̄z remanz o
ut oport et duc p̄ma remanet. Duulo de 7 8 0 0 0 4 ℔ 4 9

Sj aī 7 8 0 0 0 4 ℔ 4 9 dundē uolut. d'cipat mūl p̄at 1 sub s ō q̄ si reliq̄um s d' 7 s
remanī 7 q̄ si duulum p 6 p̄ b q̄ 4 9 ſt' aa 60 ecbit 1 q̄ apl'. vñ obem p̄ere 1 ſb s
ut q̄dam q̄ poīto mlēz ip̄z p 4 fuit 4 q̄ ecbat d' 7 remanī z q̄ p̄at ſt' 7 q̄ mlēz
eād 1 p 9 q̄ ecbat ip̄a mlēm d'z s remanī 1 9 q̄ delet z t' dāpn 7 poīta ſt' 7 q̄ p̄at
duc 1 9 ſt' 7 s ēt p̄at z sub o p̄cepta tē q̄a gīd' ⁊ mlēz ip̄a p 4 ēt 1 4 q̄ ecbat d'
1 9 remanī ⁊ delet ip̄a 1 9 7 1 loco uouenarū p̄at ip̄a ⁊ ēt mlēz ead z p 9 9 ecb
bat d' o remanī 1 z delet ip̄a ⁊ 7 p̄at i 1 q̄ ſt' o p̄at z p' b' dundēda g̃ 1 z o p 4 9
q̄dat z sup̄dā tē p̄ma dunſioē. ⁊ sub zepb' ēm gīd' ponēda g̃ ip̄a z q̄ z i 4 9 mlēm q d'.
1 z o ecbta remanī 1 z q̄ id ē si mlēē dā z p 4 9 ecbēt d' 1 z ⁊ mlēm ē p 9 9 ecb
bēt d' z o delet itaq 1 z 9 p̄at 1 1 loco ú erāt z d' 1 z 9 z p̄at ſt' o ēm gīd'. p' b' p̄at
z sub o ſi gīd'. ⁊ mlēz ip̄a p 4 9 9 ecbat d' 1 z o remanī z ſt' o 9 delet iaio suo 1 z o
q̄ ſt' fuāt d' p̄cta dunſioē. ⁊ q̄ dlē figal dr ut dāpnare sunt sicut ecc delenc l
dligē ut dāpnarc. p' b' coplēt ip̄a aī 4 q̄ꝫ i p̄mo gīdu mū fuīnt z 4 q̄ aī ſt' mū
4 9 p̄at o sub 4 p̄ma gīd'. 9 z 4 ſt' ugulā d' 4 9 eq̄tē d'cipa ut ihuc d'cipē mā
festē dlignaē.

Cur q̄ d dunſiōib; ducm̄ lucidi' mīdeleāt. q̄dā mīz p 9 9 duudam̄ sicq 4 9 1 7 z o o
ponī 9 7 ſt' mīz zepb'. dundat mīm tū figāz ultāz mū duudēdu. ſ. 4 9 1 p 9 7 4
q̄ dunſioē eucnūt 6 ō q̄ 9 9 p̄ma g̃ 1 o o q̄ ab alio dcnarus mūo. vñ ōlem dundere
4 9 ſ. mūm ducū figāz ultāz. p 1 o eq̄ dunſioē puenūt tē 6. ſ. dcmā mū. 9 aī
9 9 mū ſit' d' 1 o o debem̄ accipē q̄lcq; āpl' dic. Vñ 9 ūgt 6 p̄at ip̄a 6 sub p̄o gīdu mū
ip̄z tū figāz. b' ē sub 1 q̄ ē i q̄mo gīdu tot' mū. 9 mlēz ip̄a 6 p 9 d' 9 9 ēt 4 ⁊ q̄ ecbat
d' 4 9 ſ. dcmō ducū ultāz figāz remanz 4 q̄ p̄at ſt' 9 9 mlēz ead 6 p 9 d' 9 9 ēt
⁊ t q̄ ecbat d' 4 1 ſ. d' coplādē 4 ſt' poīnz aī 1 añcdēdo remanī 9 q̄ p̄at ſt' 1 9 poīta
4 t' dāpnz. t' delenc i cord. ēt p̄dā 9 q̄ poīta g̃ ſt' 1 remanz ecdunſioē d' 4 9 1 i 9 9 q̄bz 9 coplā
tis aī figā añcdēdo i gīdbz. ſ. aī 7 q̄ꝫ i q̄mo gīdu mū fuerūt 9 9 q̄ dundat p 9 9. ſp
dunſioē ecbit 1 p̄at 1 sub 7 9 mlēz i p 9 d' 9 9 ēt 9 4 q̄bz delenc 9 q̄ ſt' fuāt d' 4 9 1
9 mlēz eād 1 p 9 ēt 7 4 q̄bz reliq̄t 7 aī q̄bz 9 fuāt coplāta. 9 aī mch remanens d' ip̄g
7 ad copulād aī z añcdēdā g̃. 9 ip̄ā z mū ſit' d' 9 9 p̄at o sub ip̄g z 9 coplēt ip̄ā z
aī o et añcdēdē. 9 ēt z o ſtē aī ip̄ā z o mū ſit' d' 9 9 ponēd' ēt o sub dē o aī z copla
tis. ſ. sub ip̄ā q̄ ē i ſo gīdu mū. p' b' coplēt ip̄ā z o aī o et añcdēdā. ſ. aī illo q̄ ē i p̄mo
gīdu suā ē z o o q̄ dundēda relinq̄t p 9 9 4 p q̄ dunſioē ponēda g̃ z sub o p̄mi gīd'. p̄cepta mē
9 mlēz ip̄ā p 9 9 ecbat d' z o sup̄ coplāta remanī z q̄ p̄at ſt' o ſi gīd' 9 intligat copla
tōm ip̄z aī o añcdēdē q̄ ē i p̄mo gīdu q̄ꝫ z o d' q̄bz ecbat mlōm ecdūd z i 9 rema
nebit 6 q̄ p̄at ſt' ugulā d' 9 9 eqtē d'cipat. 9 debet p q̄ſtm dunſioē. 6/9 9 6 1 0 0 z
Cum latus d' dunſioē miorā i mūſ duaz figāz q̄ꝫ ſm regul'. i. asā dicaī ē mdut. Nē
ut ecdūd dunſioēs i ea q̄ꝫ ponīt. i. aī regul' ostēdūt. 9 quā mſ p 9 ponz mīg mīqūa p

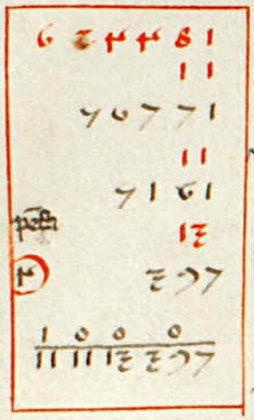
4 9 1 7 z o o
9 9
6

4 9 1 7 z o o
6/9 9 6 1 0 0 z

pmos q̄ nūq̄ dumdē ualeam⁹ cū leui⁹ ⁊ subtili⁹ i sequ⁹ ostēdē dcīa. s. ut reperiam⁹ ip̄oz regulē. ⁊ nūi eq̄bz ⁊ ponūt. ⁊ ponāt sub q̄dā ūgla ut sep minoz q̄ nō maioz q̄ ipsi⁹ simstrā ut sup̄ i tb eod'mō dcor. p̄b dumdat nūm q̄ dumdē pmōrē ex ponēdo dumdē. b̄ē pmnoz nūm l' figū q̄ fuit sub ūgla ⁊ si aliq̄d sr̄ bīm remāt pōat ip̄z sr̄ eid figū l' nūm. ⁊ exeq̄ nūq̄ ex dumdē dumdat p̄cedēte nūq̄ ul' figū i ūgla. ⁊ sup̄stuū si fuit pōat sr̄ ip̄z cedēte nūm ul' figū. Et sic sep̄ pon-dō cedētes cōponēdo nūq̄ exeūtes ex dumdō dcor ad fine ip̄ius deuīt dumdē dudat. ⁊ sup̄stua sr̄ eis ponēda. ⁊ exeūtē nūm ex dumdē ultīe ⁊ p̄ōtōz. i. ultīm nūi sub ūgla exeūtē. aū ip̄i ponē ⁊ sic ē. Et sic hēbz dumdō q̄ūlibz nūeri dati. p q̄libz ⁊ pōm nūm quocūlibz gradui. Nā aū q̄ h dmōstant cōib⁹ declarē. ⁊ p̄ eoz ⁊ p̄ōz nūoz ineūtē si ni ⁊ eoz q̄ ⁊ sū regul' ecclē dmōstatiue duram nacū. Et ai nūi duar figūr ⁊ sy regul' i q̄dā tabla sup̄ sit dmōstati ⁊ p̄ōz regle duaz silz figūr singulariē sub ūgul' ostēdāt. aliōz ū ūgulum ⁊ p̄ōz p̄regulam ip̄e ostēdemus. Cōpōnonel nūoz ar dufigar h q cū 11 figil cebūr

12	1/2 2	44	1/4 0/11	71	1/2 0/27
13	1/2 3	45	1/7 0/3	74	1/2 0/7 0/7
14	1/2 7	46	1/2 0/23	76	1/4 0/19
16	1/2 8	48	1/6 0/8	78	1/7 0/11
18	1/2 0/9	49	1/7 0/7	80	1/8 0/10
20	1/2 0/10	50	1/7 0/10	81	0/9 0/9
21	1/2 0/7	51	1/2 0/17	82	1/2 0/41
22	1/2 0/11	52	1/4 0/13	84	1/2 0/6 0/7
24	1/2 0/8	54	1/6 0/9	87	1/7 0/17
25	1/7 0/7	55	1/7 0/11	86	1/2 0/43
26	1/2 0/13	56	1/7 0/8	87	1/2 0/29
27	1/2 0/9	57	1/2 0/19	88	1/8 0/11
28	1/4 0/7	58	1/2 0/29	90	1/9 0/10
30	1/2 0/15	60	1/6 0/10	91	1/7 0/13
32	1/4 0/8	62	1/2 0/31	92	1/4 0/23
33	1/2 0/11	63	1/7 0/9	93	1/2 0/31
34	1/2 0/17	64	1/8 0/8	94	1/2 0/47
35	1/7 0/7	65	1/7 0/13	95	1/7 0/19
36	1/4 0/9	66	1/6 0/11	96	1/2 0/6 0/8
38	1/2 0/19	68	1/4 0/17	98	1/2 0/7 0/7
39	1/2 0/13	69	1/2 0/23	99	1/9 0/11
40	1/4 0/10	70	1/7 0/10	100	1/10 0/10
42	1/6 0/7	72	1/8 0/9		

Cum autem regulas prescriptorum numerorum imbuit ex frequenti usu quis sciuerit **Regula universalis de reperiendis compositionibus imperium numerorum**
et voluerit regulas i. compositionis cuiuslibet numeri aliorum numerorum et illis plures signa reperire
Et quod primus numerus i. sui rationem extitit cognoscere voluerit. describat numerum in tabula. et descripto prius dicat si numerus par
fuerit. vel impar. nam si par fuerit. ipsum compositum esse cognoscat. si impar. aut compositus aut primus erit. Sed est numerus
pares compositi. aut ex paribus et imparibus. aut ex paribus tantum. Et regule ipsorum primo investigandi
a paribus numeris. ut in suo demonstrabitur loco. Impares vero numeri componuntur ex imparibus tantum. Unde componentes
ipsos per impares tantum investigantur a quibus sumamus initium. Cum itaque signa primi generis cuiuslibet imparis
numeri 5 extiterit nunc a 5 compositum esse cognoscat. hoc est quod per 5 integraliter dividitur. Si autem alia signa impara
in primo gradu extiterit. que facit totum numerum esse impare. accipiat siquidem pensa ipsius per novenarium que si fuerit
zephyrum tunc $\frac{1}{9}$ et si 6 pensa fuerit tunc $\frac{1}{3}$ in sua erit compositione. Si autem pensa nulla istorum extiterit di
videat ipsum per 7 et si aliquid in se fuerit dividat iterum numerum per 11 et si aliquid superfuerit dividat ipsum per
13 et semper dividendo per primos numeros ordinato. Sicut quod scribunt in tabula supra descripta dicere aliquid
primum numerum invenit per quem propositum numerum absque aliqua superatione possit dividere vel dicere ad eius
venit radicem. si per nullum ipsorum dividi potuerit. tunc ipsum primum esse iudicabit. Si autem per aliquem
predictorum primorum numerorum ipsum dividere absque superatione potuerit quod ex divisione pervenerit dividat
iterum per ipsum et numerus qui ex divisione exivit. iterum per eundem primum numerum dividat. Hoc est quod ab eodem incipiat quem
componentes ipsius per ordinem per reliquos primos numeros usque ad ipsum radicem si ipse non habuerit compositionem. et sic
semper faciendo egrediatur. dicere quod ipsum habuerit componentes. Quibus per se habitis ipsis sub quadam regula minorem
per maiorem summo studio studeat collocare. Et sic habetur regula compositionis cuiuslibet imparis numeri.
Ubi igitur sit numerus 805 cuius regula quaeritur cum prima ipsius signa sit 5 minorum $\frac{1}{5}$ in sua erit compositione
Quare dividat cum numerum per 5 exiet 161 quorum pensa accepta que est 8 ostendit ipsum 161 non per 3 nec per 9
posse dividi integraliter. Unde dividat cum per 7 exiet 23 qui numerus sine regula apud 7 reperitur componentes
s. 5 et 7 et 23 sub quadam regula et habebit $\frac{1\ 0\ 0}{5\ 7\ 23}$ pro 805 compositione. Hoc quantum [illegible] septimum [illegible]
[illegible] una octigentesima quinta. quod ducta multiplicatione [illegible] in septem [illegible] XXXV [illegible]
[illegible] 1805 Item si [illegible] 957 [illegible] dividat ipsum per 3 [illegible] pensa ipsius numeri exibit 319
[illegible] per 3 [illegible] cum pensa ipsorum sit 4 [illegible] per 7 [illegible] 11 [illegible]
[illegible] 29 qui numerus primus [illegible] sub regula [illegible] 957
habebitur $\frac{1\ 0\ 0}{3\ 11\ 29}$ ut hic ostenditur. **De regula de 951 reperienda.**
Cum si [illegible] 951 reperire voluerit dividat ipsum per 3 [illegible] pensa ipsorum est 6 exibit 317 quibus [illegible]
[illegible] impossibile [illegible] dividi per 7 [illegible] per 11 nec per 13 nec per 17 Et per ipsorum [illegible]
[illegible] si divisa fuerit per 19 [illegible] 19 [illegible] 951 est $\frac{1\ 0}{3\ 317}$ [illegible]
87 [illegible] voluerit cum pensa ipsius numeri [illegible] 0 dividat cum per 9 exibit 97 qui numerus 97 [illegible]
primus esse monstratur. Qua regula [illegible] $\frac{1}{9}$ [illegible] $\frac{1}{97}$ **Regulae de 1469 inventio.**
Nam si [illegible] 1469 [illegible] accepta ipsius numeri pensa que est 2 [illegible] ipsum [illegible]
novenarium. Nam si per 7 [illegible] 6 [illegible] 11 [illegible] 6 per 13 [illegible] exibit
11 [illegible] per quibus non oportet [illegible] per aliquem sequentium primorum numerorum. [illegible] per eadem 13 [illegible]
[illegible] 1469 [illegible] $\frac{1\ 0}{13\ 113}$ **De regula de 2543 reperienda**
Item si [illegible] 2543 [illegible] accepta ipsius numeri pensa que est 5 [illegible] 3 [illegible] 9 [illegible]
[illegible] per septenarium remanet 2 et per 11 remanet 2 per 13 [illegible] 8 Et sic in



uenerit q; nō p 17 ut 19 aut p 12 seu p 19 ut p 1 nō p 17 aut p 1 nō p 17 ut p 19
p duodi. 7 ulē. quā p 19 nō ē q̄rēdū q; 19 ꝑ pl' radice ipī. Et si possibile eēt 12 1
i sua ꝓportōe aliquē maiorē p̄mū nūz quā 19 hūc posse. g ipō maiō nūl iqūelibz a
lui mlāt facēt cātē 12 1 quā oportēt eē mn' ō 19 q̄ē i possibile. iō q; usq; i 19
ipī regulā q̄rēdo eī nī inuenim'. ergo ē sīḡ regla.

Tem si cā ō 6 12 1 8 1 reperire uoluī. ipm nūm nī 12 nī 9 nī 7 hēc duct' dispōitōibz eē
ogloar. P 11 uo duodi ē pmg udelicz iōdama ē 9 6 7 7 1 q̄ nūm p 11 duudat. s. ut tnar si
nūm 1/11 huīt nā p eos nūl q̄ st' minores ō 11 ſ. p 9 ap 7 ap 12 nō opōtet ut duudaī iō qz
6 12 1 8 1 repm nō fuer. Nec ē i isto. ſ. i 9 6 7 7 1 aī sit ō ipī ꝓportōe aliq; eō potēt repiri.
Ex q̄ uo duuliēt. ſ. p 11 erabūt 9 16 1 qbz nūm p 11 duuliſ remanz 12 Q nūa 1/11 nūm hūc ē in
possibile. P b uidelīt ē. si habeāt 1/12 ſ. duudat ea p 12 ex q̄ duuliēt exeūt 12 7 qbz nī
1/12 nī 1/17 aut 1/19 repm potūnt. vñ nūa 12 7 eē alam ogla m'. qz iē 19 7 ipī radicē. nō
ē aliq; p̄m' nūl. i. sim i'. nec ulē ipī radicē ā pdcm' eūt q̄rēdū. ē ē ꝓpōitio. i. regla ō
6 12 1 8 1 ut hic ostēdim'. 1/11 0/12 0/12 7 Probano hāc regle

Dim si iueā reglam p̄la ō 7 plm uoluī. accipiat p̄la ō 6 12 1 8 1 p 7 q̄ē 1 7 hm ei
cpūte 7 sumat p̄la. ō 11 p̄ p̄mis subūgla q̄ē 1 7 mlez eā p 1. ſ. p p̄la ō alūl 11 erūt 16 q̄
duudat p 7 remanz 12 q̄ mlez p 6 ſ. p p̄la ō 12 erūt ōqbz ōmat 7 remanz 9 q̄ mlez p 9
ſ. p p̄la ō 19 7 erūt 9 q̄ duudat p 7 remanz 1 ut p pensa fuata sr. ō regula pāū nūoꝝ rep

Sīuo ee aliq; nūo pm q̄s reglaz inuenire uoluī accipiat sūl' p̄la ei endēs modo unuerſalis
p 9 q̄ si fuīt 0 hēbit 1/9 Et si fuīt 12 ut 6 hēbit 1/6 i sua ꝓportōe. Si aū p̄la nulla utrūq;
eorūt. pudat duudēcimo p 8 nūm duarū figāz q̄s i pmo 7 i so gēdu q̄le fuīt supfluū
q̄ si fuīt 0 7 figā tm gēdus par ereūt. ut 1 ut 1 ut 6 aut 8 ut 0 totū nūm ēlez gēduq;
p 8 duudi posse ogloar. Si aū ipa tm figa i par ereūt. ut 1 ut 12 ut 4 ut 7 aut 9
nūl ipe 1/12 i sua ꝓportōe reapit. Si uo illud supfluū 1 ereūt. 7 figa tm gēdus fuīt i par;
coe nūl p 8 silr duuceē. Et si par ereūt tm 1/12 i sua hēbitē ꝓportōe. Si ā illud supfluū 12
ut 6 ereūt. nūl tm p 12 equaliz nūl duudēē. Et sm h' accipiat parz ꝓportōez ō paribz nuiz
deēr hāc reglā ipī. ut ad aliquē i paē nūm ereūtur. dq; i pau sm stim i pauū ordinē
studiē inuenīt. Si ā si ipo gēdu aliq; pauū nūoꝝ zephyrz ereūt. ōmat ipz. 7 p ipo hūt 1/10
i ꝓportōe illi nuī. Et si aliud o icapite nuī remāsit ōmat tm ipz ō nūo. 7 tm 1/10 i
ēdē nuī ꝓportōe hūt. Et sic sēp deēr o icapite nūoꝝ ereūt. velz itelligē. Et ut q̄dam
q̄ō pauū nūoꝝ reglaz iuēcōe lucidi' ōplēdāt ea aī nūoz ōmostrationibz ostēdāt. De ut
Tiq̄mē reglā ō 12 6 quoꝝ p̄la cū sit ostēdit nona eoꝝ pauē glā ō 12 6 repēdo
i regū eē. q̄r 12 6 duudat p 9 erabūt 14 quoz 1a supi i tabla reglaz ꝓportoz duarū
figūz fi gēdus 1/12 7 eē utriq; ōmostrat. uñ p reglā ō 12 6 hēt 1/12 7/9 ut b ostēdit.

Tem si q̄rat reglā ō 14 6 npoz p̄la q̄ē 12 ōmostrat q̄ p 6 possūt duudi. qbz i 6 duuliq
ereūt 6 q̄z reglā ē 1/12 0/12 7 sic hēbitē p 1a ō 14 6 ut b notatur. 1/12 0/6 0/12

Siuo ei ō 12 11 2 reperire uoluī. ai npm p̄la q̄ē 6 ostēdit ipa p 6 posse duudi. Duudat g
12 11 2 p 6 erabūt 2 9 4 7 ōqbz accepta p̄la q̄ē 1 ostēdit q̄ nū p 6 nī p 9 possūt duudi. uñ
duudēdū q; 4 7 p 8 .ſ. nūl duaz figāz ōq̄ duuliēt remanz 1 eoꝝ remāliēt. 7 exceo q̄ figū

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ētu gdus nūs. ℥ ī pū ꝯstat ostēdūt ℥ ℔ ℈ posse dumdi. dumdāt ℔ ℈ exbēt ℔ ℔ ℈ ē ℈ ℈ ℈

remanet 4 q 4 pār sr 8 d ungla. & dundat 4 2 4 2 p 10 exibē 4 2 4 & remanz 2 hō ē ut
dmā figā ymi gdū d 4 2 4 2 q 4 2 4 dundat p 11 exibē 2 8 & remanz 6 q 6 pār sr 11 d
ūgla. & 2 8 pār añ ungla. & sic hēbit q̄sita dundā $\frac{0}{2}\ \frac{7}{8}\ \frac{6}{10}\ \frac{}{11}$ 2 8 Plano hē dundōis
Sā dundōz si ppēla d 12 plane uoluīt. dundat p̄ sēpta 6 7 8 9 8 p 12 remanz 1 2 q lāne
ppēla. & h dundat 2 8 añ ūgā pōita p 12 remanz 1 2 q mlēz p 11 d ūgla. & sr addat
6 q̄ sr 11 ēt 1 2 8 q dundat p 12 remanz 8 q mlēz p 10 d ūgla. & sr addat 2 q̄ sr 10
ēt 8 2 q dundat p 12 remanz 4 q mlēz p 8 d ūgla. & sr addat 4 q̄ sr 8 ēt 4 q dun
dat p 12 remanz 6 q mlēz p 2 d ūglā. ēt 12 ut supi ppēla fuatū ē. Et auīcdū ē nequ
aliquā dundōz p aliquā pēla aliē nūi ecclēal sub ūglā duudōz unq̄ plane & sueuat.
ō q̄ leuit p añ posiz ē ēcepē. q̄r ī hac duudōe p hibē p 11 plane. q̄ supfluo & remanēt
d 2 8 ut ēqlibz alio nūo ī 11 q̄q̄ sub ūglā mlōato. & p 11 d pēla dundo. nl supaz; uñ supi
2 8 recta ri ēcē. ri posiz p plano d 11 aīgla. Et sciat q̄ī dundōibz nūoz alia restat
ecēna. s. añ nūl duudēd alīq̄ hē cōmunitatē añ duudoze. s. q̄ duudēd nūq̄ duudaē in
aīgl̄ paliquē nūm ul nūq̄ q̄ sit ex regla dundong. Cuī p̄mū duudaō nūq̄ p nūz & pōitōz
q̄ī ūgle dundong ipē duudeat huīt. sui maō ī ūgla sec ut mīnō. ō q̄ añ ipz p ipz dundat
nul ex dundōe remanebit. Et ut hāpēl itelligāt ea añ nuīq̄ inseq̄ntib; dmostrentur.
Sit 8 1 4 4 0 p 8 1 9 0 duudē uoluīt repiat dundong regla q̄ Duudo d 8 1 4 4 0 p 8 1 9 0
ē $\frac{1}{7}\ \frac{0}{7}\ \frac{0}{10}\ \frac{0}{12}$ & añ ī d 8 1 4 4 0 sit $\frac{1}{10}$ p 0 q̄ē ī p̄mo gdu ipōz q̄ us $\frac{1}{10}$ ñ sit ī capite
ūgle. nī p 10 p̄mit 8 1 4 4 0 q̄ duudēda. hē q̄ dmaō 0 d ipō nūo remanebit 8 1 4 4 q̄
restat duudendi exēno $\frac{1}{10}$ d ungla. p $\frac{1}{7}\ \frac{0}{7}\ \frac{0}{12}$
Item 8 1 4 4 p 7 duudēt. ō q̄ 0 ē pēla ipōz p nouenariū. Vñ duudat ipā p 7 d ūga
exibē 7 0 6 q̄ restat duudēda p $\frac{1}{7}\ \frac{0}{12}$ um 7 0 6 p 7 dunsiz exeūt 1 2 7 & remanz 2 q̄
pār sr 7 Et 1 2 7 p 12 dundat. exeūt 7 & remanēt 12 q̄ 12 pār sr 12 & exeūta 7 pār
añ ūgay. & hāc hēbit q̄sita dunsiones. $\frac{7}{7}\ \frac{12}{12}$ 7
Imsū p̄sēpta dunsiē plane uoluīt ponēda ēt 10 7 q̄ exeūta fuēt d ūga sub eād ūgn
p 7 & sr ipā ponēda ō zephyra. uel hāc ūglā ēmt. $\frac{0}{10}\ \frac{0}{7}\ \frac{7}{7}\ \frac{12}{12}$ ipā potīt eq plane sm
p̄sēpta plūdi ordinē. Vl alr. Iunct 7 0 6 p nūo dunso et $\frac{1}{7}\ \frac{0}{12}$ p dunsoze. & sm h̄z pla
re studeāt p modū supdictū. Sciat ē d dunsiōibz nūoz p pōitoz nūq̄ dēp ē undēc.
ū ī eoz pēdēibz nūm tū figāy ul plū exister. Sz ut ī h opusclo ēpleta decīa dui
dēdi ptineat. nuq̄ dundē ī eq. q̄ tū figāy ul plū ī seq̄ntib; ostēdā. Duuslo nūoz p
Vm ā q̄cūlibz nūz ēlibz gēdus p q̄cūlibz nūz tū figāy. bē ītu nuōs asham tau genus
gēdus q̄ d dundē uoluīt pār silēz gēdū ipī nūi tū figāy sub sili gēdu dundēdi nūi. & pūdat si
nūs tū figāi ultimay dundēdi nūi maioz dunsoze ēnsteīt. si ē maō l equal fuīt ma
pēdēt ēt u am gēdus ecēnus nūi sub ētia figā abultima. & si minoz ia pēdēt ēt sub añcedēo.
hē sub q̄m abultima. Et pōita figā sub q̄libz p̄dictay quā talē ē q̄ueīt. d mlēata ipi
inuoy dunsoze. s. ī eū ī q̄ nūz maō dunsa fuciāt nūz tū figāy. l q̄ītuor ultīay. l ima fē
ut nō remaneat nō nūz dunsozis ul ulē. Et tē mlēz eā p ultimā figā dunsozis nūi. Et mlt
aplicatz d nūo ultie figē. si ponī ēcnlut. Et si nō eī ēcnlut d nūo duay figāy ultīay
Et supfluī pōat sr eidē gēdū d quo supfluīt. Et mlēz ītūn eand pōitā figā p añcedēm

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ultime dumlong mũi. sp eã q̃ ẽ ĩ ip̃i so gdu. ⁊ ucmẽ sũmã exẽtur ꝺ sic supfluo ai añcedẽt figã. ⁊ relq̃ sic ꝑ ip̃z relẽdo. sc̃ꝫ dãpnãdo aluꝺ ꝑmũ ꝓnũ supfluũ. Et ꝺnc mlẽz eãꝫ ꝓnũ figã ꝓ figã ꝑm gẽt ẽt ꝺ dumlonꝫ mũ. ⁊ sũmã mlcoꝫ exẽtur ꝺ cop̃one hi supflua eã añ cedẽte figã maiozꝫ mũ. ⁊ ꝑmũ gdũ ip̃i supflua ꝓat sup ip̃a añcedẽt figã relq̃ sic ꝑ ip̃z relẽdo. s. ꝑ dãpnãdo. aluꝺ sm dictũ supfluũ. Debꝫ studat ponẽ aliã malẽ figã sub alia añ cedẽte figã maiozꝫ mũ. i. añ ꝑmã ꝓnã figã. ⁊ mlcanta ĩ ꝑsep̃tũ dumlonge mũy facat eo plato ꝛ ctũ supflu. ⁊ añcedẽtꝫ figẽ. ubꝫ sẽ eã q̃ uadat mlcãco ꝙ ordine ꝑ figꝫ dumlonꝫ mũ. fiẽ ĩ ꝑmã ꝓnã figã dctã. sep̃ supflua ꝓ ordine. ⁊ ꝺin ozꝫ ĩ relq̃ figꝫ usq; ad finẽ ꝓcedẽdo. sic studat operꝫ. Duo ergo hq̃ supfluoꝝ suꝑductoꝝ. Et añcedẽte figã. ꝓ fabꝛẽ mũ mmõ dumlonge. cũ ꝓat zeph̃ sub ip̃a añtedẽte figã. ⁊ coplabit eã añcedẽs figẽ. ⁊ supfluo alia añcedẽte figẽ sub q̃ ait ꝓdcm zeph̃. ẽt uno ꝓnẽda figã. ⁊ si uh̃y mũs coplatoꝛ supflu. ⁊ duaꝝ añcedẽtiꝫ figaꝝ. mmõ dumlonge fuit. ẽt ita añ ꝓdcm zeph̃. aliud o ꝓnẽdꝫ ⁊ coplab dcto supfluo ⁊ ducit duabꝫ figis alia eis añcedẽte figã. sub q̃ ꝓat tale figã. q̃ mlcanta ĩ dumlonge mũo facat fẽ mũm coplatoꝛ supflu. ⁊ ai et añcedẽtiꝫ figaꝝ. ⁊ sic deinceps quousq; siliui dumlonges. ⁊ utq; dcta ꝯ liq̃t exponat̃ ea ai mũs ostẽdat mẽ.

Si uolũt dumdẽ 1 ꝛ 4 ꝑ ꝛ 47 ꝺ sc̃at ꝛ 47 sub ꝛ 40 ꝺ 1 ꝛ 4 Et q̃ mũ ei figaꝝ ultiꝫ dumdẽdi mũ. i. 1 ꝛ 4 mmoz ẽ ꝺ ꝛ 47 . s. ꝺ dumlonge mũo. Ꝺ sub q̃m figã ip̃i dum dẽdi mũ. q̃ ꝑmũ occupet gdũ. i. sub. ⁊ figã excẽtꝫ mũ ait ponẽda. ⁊ mlẽ q̃ mlcam ꝛ 47 facat fẽ 1 ꝛ 4 q̃ eĩt ⁊ q̃lz ꝓtus sub ⁊ mlẽz ip̃i pulmã figis dumlonꝫ mũ. s. ꝑ ꝛ et 10 q̃ exẽtur ꝺ 1 ꝛ . s. ꝺ mũo duaꝝ uicinaꝝ figaꝝ mũ dumdẽdi. ait ĩ ꝓssit ea ꝺ mũo ultie figẽ et fẽ. remanꝫ ꝛ q̃ coplanda ḡ ai añcedẽtiꝫ ꝛ facit ꝛ 4 ꝺ q̃lz exẽtus mlcanꝫ ꝓnã ⁊ ĩ ⁊ dumlonꝫ mũ remanꝫ o q̃ ꝓat fiẽ 4 ⁊ mlcat eaꝺ ꝓnta ⁊ ꝑ et ꝛ ⁊ q̃ exẽtur ꝺ o. s. ꝺ eo plato o ꝑmi gdus dumdẽdi mũ remanꝫ 6 4 q̃ ꝓat sup ugã suꝑficiaꝝ ⁊ ai ꝺ ꝛ 47 secũdũ ꝺsc̃ptã. Et exẽtus ⁊ ꝓat añ ip̃ã ugã. ⁊ hẽbur ꝙ quesitũ dumlonge.

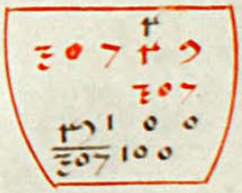
Dumlond. ꝛ 07 4 ꝛ 07

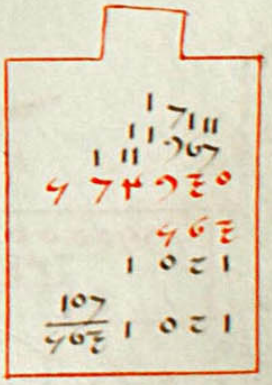
Si ꝛ 07 4 ꝑ ꝛ 07 dumdẽ uolũt ꝺsc̃at ꝛ 07 sub 7 4 o q̃ ꝛ 07 q̃ mũ ei figaꝝ ultimi dumdẽdi mũ eĩt ẽ dumlonge mũo ponẽdũ ẽ 1 sub ꝑmo gdu mũ ꝑcutiaꝝ ei figaꝝ. s. sub 7 q̃ ĩ ctio gdu dumdẽdi mũ. ⁊ mlẽz ip̃z 1 ꝑ dumlonꝫ facit ꝛ ꝙlz relq̃ ẽ q̃ ĩ ultimo gdu dumdẽdi. ⁊ mlẽz ĩm eaꝺ 1 ꝑ o dumlonꝫ facat o ꝙ relq̃t ip̃z o q̃ ẽ in dumdẽdi mũo. Et ĩm mlẽz eaꝺ 1 ꝑ 7 facit 7 ꝙlz relq̃t ip̃i 7 q̃ in dumdẽdi mũo. Ꝺ ai ꝙ quẽlꝫ gdũ mlcat ctũ gdũ facẽ ab ip̃o quẽ mlcat. Et ai mlcat ctũ ꝙntũ gdũ facẽ. ⁊ mlcatꝫ facat ai q̃ctũ. ⁊ ai mlcat ꝑmũ facẽ ctũ. Et q̃ 4 q̃ añcedẽ 7 i dumdẽdi mũo mũ q̃ ꝛ 07 . s. ꝺ i unsore ponẽdẽ o sub ip̃i 4 ⁊ ĩm q 4 ꝺ eaꝺ dumdẽdi mũ mm q̃ eaꝺ ꝛ 07 ponẽdũ eĩt o sub ꝺ. s. ĩ ꝑmo gdu excẽtꝫ mũ. ⁊ ꝓducta 4 ꝺ ꝓat añ ip̃ã ugãm 7 hẽbur 4 ꝛ 07 100 q̃ q̃situe dumlonge.

Item si ꝓpoſũr dumdẽ 4 7 4 ꝛ 07 o ꝑ 4 7 ꝛ ꝓtus 4 7 ꝛ sub ꝛ 07 o ꝓat ꝓcptꝫ distributoꝛibꝫ 1 sub 4 . s. ꝙrto gdu. ⁊ mlẽz ip̃m ꝑ 4 dumlonꝫ mũ. fuit 4 ꝙlz relq̃t 4 q̃ ĩ ultimo gdu dumdẽdi mũ. q. ai q̃ctũ gdũ mlcat ctũ sequẽ gdũ facẽ bẽ q̃ctũ ab ip̃o quẽ mlcat. ⁊ mlẽz eaꝺ 1 ꝑ 6 dumlonꝫ fuit 6 q̃ exẽtur ꝺ 7 remanꝫ 1 q̃ ꝓat fiẽ eaꝺ 7 ꝛ ai q̃ctũ gdũ mlcat sm ꝙntũ gdũ facẽ. ⁊ ultĩ mlẽz 1 ꝑ 7 dumlonge facẽ 7 q̃ exẽtur ꝺ 1 bẽ ꝺ 1 ꝑ 1 q̃

ĩ maiori numero copulato. et si supfluum fuerit. ponat primũ gradum ip̃i sup eandẽ añcedẽtem figuram.

sup ponẽdo





remanet sr̃ 7 nã ai q̃re gd̃ mlcat pmũ q̃tũ gdũ fac ut tñnate itpõ. Et ideo pdca
ꝯcedendo ꝙ q̃ꝯ iꝯo gdu. bñ ed ꝙ q̃tñnat itpõ remanebõ 11 s. 1 sr̃ q̃ntũ gdũ
7 aluud sr̃ q̃tũ. ai q̃bz 11 coplet 7 fuit 11 7 q̃ai sit mult ꝙ 6 z. s. duulcae ponẽ
dũ ẽ o sub upil 7 coplet z q̃ꝯ iꝯo gdu dundedi mũ cũ 11 7 fiet 11 7 z. Qr̃ poat
iꝯo gdu arbitr exeũtil talẽ figaz q̃ mlcatu ꝙ 6 z fuerat sẽ 11 7 z q̃ figi ett z q̃ mlcz
ꝙ duulcorũ. fuit 10 q̃ cedat d 11 pcipuꝰ remanz ꝙ relinq̃t upz 1 d fiat pol
cũ sr̃ ꝙ deleat aliud 1 d ẽ sr̃ 7 mlcz z ꝙ duulcorũ fuit 12 q̃ cedat d 1 7 rema
nẽ 7 q̃ poat sr̃ 7 deleat 1 d ẽ sr̃ ꝙ mlcz z ꝙ duulcorũ. fuit 6 q̃ cedat d 7 re-
manẽ 6 7 deleat 7 q̃ etiã sr̃ 7 poat 6 7 sr̃ 7 ut i diplõe dr̃. Et coplet upa 6 7
cũ 0 fuit 670 ꝙ q̃dz ducũ dnicoꝝ poat 1 sub 0 7 mlcz ipõ ꝙ 4 duulcorũ. fuit 4 q̃
cedat d 6 remanz 1 deleat upa 6 7 poat ibid 1 7 mlcz 1 ꝙ 6 fuit 6 q̃ cedat d 7
remanz 1 deleat 7 7 poat ubi ipm 1 7 mlcz 1 ꝙ duulcorũ fuit z q̃ cedat d 110
remanẽ 107 q̃ poat sr̃ ugãz d 96 z 7 cũ ipa poat cedẽtia 107 1 uñ hac diplõe dicẽz,
ba duulcoz sup pela d 11 plane uolũt duudat 7 7 7 o ꝙ 11 te Probatio ste
manẽ 7 q̃ fuerꝯ ppela 7 duudat cedẽtia 107 1 silr ꝙ 11 remanẽ 7 q̃ mlcz ꝙ z
q̃ remanẽ ce duulcorũ 96 z ꝙ 11 et 18 q̃z adelat pela nũ remanentil sr̃ ugã. s. d 107
q̃ pela ẽ 8 q̃ adunlil 107 ꝙ 11 remanẽ 8 7 sic hebit z 6 q̃z duulcil ꝙ 11 remanẽ
7 ut ꝙ pela oporteat remare. Volendũ itaq; arbitriũ i ponẽdis figil exeũtiby
nũl ai nuĩ tũ figaz ut plũ dundũt ꝙ nuloꝝ tũ figaz tale tdũ magiltrũ ut 7 site
ut si duulcoz nũl ppe fuit alicui nũo cẽtenario sui pl̃ sui mul sit eo. 7 aspiaat cẽ
q̃ figal sit ponẽda figa i nũo exeũte. 7 exillis figil reliquat duas q̃ iꝯo 7 ipmo gdu
cani. Reliduũ uo nuloꝝ duudat ꝙ nũm cẽtenarioꝝ cui duulcoz ppor exeũt. 7 q̃t ex
duulcis pueñt ẽt ponẽda figa ut pz pl̃. si duulcor ẽt mul nũo pdicto cẽtenario
ut pz mul. si duulcor fuit pl̃ eod nũo cẽtenario Vbi gra uolũ duudẽ 1 7
ꝙ 7 1 relinq̃t 7 7 dundem 1 q̃ remanẽ ꝙ 7 cũ 1 7 1 sit ppor 7 00 quam
alio cẽtenario nũo uenẽt z q̃z dãoꝝ ẽt mul q 7 1 fuit pl̃ 7 00 7 si cẽt mul ut
z 70 dãoꝝ cẽt pl̃. 7 sic itelligas i reliq. Et si duulcis nuq̃ cẽt ppor alicui cẽtenario
7 dimidio ut 140 ut ducẽtus q̃q̃gita. 7 cẽtũ silib. Tuc relicta duabz figil pdcis
reliq̃ nũm duppluz. 7 duppliata ſũma ꝑ duplũ cẽtenariorũ. 7 dimidiũ duudat
7 hebit arbitriũ ponẽd figẽ. Vbi gra uolũ duudẽ 1 z 7 ꝙ 96 z duudm 1 ꝙ ½ 7
bẽ duplũ d 1 s. 7 z ꝑ duplũ d ½ 7 hẽ ꝙ 11 ce bit z 7 plus. 7 hõ accipiat arbitriũ
Temli 7 70000 ꝙ 7 7 z duudẽ uolũt dicẽtes nuil poat, sup dictis Finalibz.
dispoital sub o q̃ta gdus. s. q̃ relicta 70 d 7 7 7 remanẽ 7 7 quoz duplũ sibi
uidat ꝑ duplũ d ½ 7 ꝙ duulcoꝝ q̃ ẽ ppe 7 70 hẽ s uenet ex duulcẽ. 7 mlcet
s ꝙ 7 duulcoz ẽt 96 q̃ cedat d 7 7 remanẽ z q̃ poat sr̃ 7 Et s ꝙ 7 fuit z 7 q̃ ce
dat d z 7 remanẽ z q̃ poat sr̃ 7 7 dãoꝝ upa z q̃ fuer poita sr̃ 7 Et s ꝙ z duulcoꝝ
fuit z 7 Que cedat d z 0 remanẽ 6 q̃ poat sr̃ 0 7 deleat z q̃ fuer sr̃ 7 7 sic sep mlcata
poita figa. singlare ꝙ figal duulcoz nũi. capiẽdo. s. ab ultia usq; ad pma uenẽdo.
sep oportet duulcoz remanẽ i ipa figa. cuq; figa poi pa pit ut i pma h duulcoiq delp cẽ

7 7 7 0 0 0 0
7 7 z
8

dmostrauit. Ph̄ pār duo zephi sub duobz zephanie. tēti ⁊ hi gēd. io d' utēq; zephania cōplā
ta ai 6 mmoiē fuauit nūm quā 7 t ⁊ Vū sūmendū 6 aī ibz zephanie. s. 6000 ⁊ 7 t ⁊
duntēdū pf̄ duuliē ponenda 8 ī p̄mo gēdu eccīe nūi. s. sub o p̄mi gēd. q; duuplo
duplo d 60 p duplū d ½ ⁊ uenit 8 q̄bz 8 i ⁊ mlc'at. d 60 eccīe remanz t q̄
t pār fī o tēu gēd. ⁊ dāpnz 6 q̄ fī o q̄tu gēd ⁊ nīm 8 i t duuloz mlc'at. d t o
eccīe remanz. 8 nā sic mlc'ato pleptoz 8 p ordinē d gēdu mutate ī gēdū ī duuloz nūo.
uto eccīe mlc'atoz ī duuidēdi nūo d gēdu i gēdū mutari debz. pār sīq; remanenta 8 sup o
si gēd ⁊ delear ipā t q̄ fuer posita fī o tēu gēd ⁊ mlcz 8 p ⁊ fuit ⁊ t q̄ delet d 8 o re
manēt 46 q̄ pār fī ūgla d 7 t ⁊ ai ipi pār 8008 ⁊ debet ppōite duuliōz q̄tuate
Et ai pcā q̄ d duuliōbz ducta ꝯ plenū magistīū bn posset ī duuidēdi nūi p nūoz nūi.
figāt ⁊ plūi. ut melius intelligāt ꝓdi duuliōz paluq; nuoz q̄ttuor figāt dmostrēt.
O li ppōt dundē 1781 ⁊ p 1977 dēlet duuloz. sub dundēdo Duuſio d 1781 ⁊ p 1977
s. 1977 sub 781 de 1781 ⁊ ai nūl q̄ttuor ultīaz figāt duuidēdi nūi. 1781
mino: fit duuloze. posito figē eccīe nūi sub p gēdu dundēdi nūi fiet necessō. vñ
pār ⁊ sub p gēdu utrozūq; nuiōrū. io q; ducto nouenario ī duuloze. fiāt tē duuidēdi
nūiy. ut q; duuloz ē ppe t o cōtenariuꝯ dundēdi ḡ 17 p t ⁊ reliq̄nd tres figē nūi dun
tēdi. s. 81 ⁊ tē mlcz ipā ⁊ p 1 duuloz ⁊ eccīe d 17 remanz 8 q̄ pār fī ⁊ mlcz
⁊ p 8 duuloz ⁊ eccīe d 8 8 remanz 7 q̄ ponat fī 8 ⁊ dāpnz posita 8 Et nūy mlcz
⁊ p 7 duuloz ⁊ eccīe d 7 t remanz 11 Et pār fī 7 t ⁊ mlcz ⁊ p t duuloz nūl
⁊ eccīe d 11 remanz 1 t q̄ pār fī ūgla d 1977 ⁊ ai ipi pār ⁊ habebit ppōi
te duuliōnz q̄ttuatem. Duuſio d 12 t 6 8 ⁊ p t 007
Tem sīnoluīt duuidē 12 t 6 8 ⁊ p t 007 dēlet nūl pār t sub tēto gēdu nuōz
plēptal. s. dispōtal ⁊ mlcz ipā t p t fuit 12 q̄bz reliq̄t 12 q̄ nūl duaz ultīaz fi
gāt dundēdi nūi. Et mlcz t p o dē ī tēto gēdu duuloz. faciet o q̄ eccīe d t q̄ in
duidendi nuō. remanz ipā t Et nūy mlcz t p o sēdi gēdu duuloz. faciet o Et eccīe
d t remanz ipā itē t Et t p 7 faciūt 1 q̄ eccīe d t 46 remanz t t 4 q̄ pār
fī t 46 sīa ai t t 48 q̄ cōplēto remanēbit nūi ai ei adiecte. figā nūl līt d
t 007 ponēdū ē o ai pōta t. s. sub p gēdu nuōz. ⁊ cōplēndo ꝯ t t 48 ai adiec
te figā. 1. ai ⁊ sub q̄bz pār 8 ī eccīe nūi. Et mlcz ipā p t ⁊ eccīe d t t remā
nz 1 quod pār fī p̄mi gēdi d t t ⁊ dāpnz t t Et 8 p o tēti gēdi. ⁊ eccīe d 14
remanz 14 Et nūy mlcz 8 p o sēdi gēdi duuloz nūi. ⁊ eccīe d 148 remanz ipā.
148 Et 8 p 7 faciūt 46 Que eccīe d 1489 remanz 1477 quo pār fī ūgla
d t 007 ⁊ ai ipām pār t 08 ⁊ habebit que dē duuliōi q̄ttuate uel hac dmostrē dlēptē
Eni si ai. ut q̄libz alia duuliōz alie quā p pelat ylluro uolūt mlcz eccīe tem
nūiy p duuloze. et uenienta sūme addat remanēte nūz ee duuliē. s. ipēm qui sup
ūgulā poi pāpitur. Ve in hac mlcz t 08 p t 007 ⁊ mlcatōi fī addat 1477 q̄
fī ūgulā. ⁊ si collecta sūma fuerit duuliū nūz. ipāy duuliōy treā force cognoscat.
Explicat capitulum quintum.
Incipit capitulum Sextum de multiplicatione integroz numeroꝝ ai rupis

96
4 9 4 0000
7 t 7
8008
96
7 t 7 8008

1 7 8 t 9
1 9 7 7
2 6
1 7 8 t 9

1 4
1 2 3 4 6 8 9
t 0 0 7
7 0 8
1 4 7 7
t 0 0 7 7 0 8

Jam aũ quibꝫ nũm̃ ꝯbꝫ ḡdus ai q̃bꝫ rupto uꝫ rupt̃ pquibꝫ nũm̃ ai quolibꝫ rupto uꝫ rupa ſ mlãre uoluũ. dicẽ mnorem nũm̃ aĩ ſuo rupto. & rupa ſ ſubmnor nũ ai ſuꝫ mnuta. ſubꝫ ſub mũ. q mnuta ſub mnuta. Et accipe ſupioꝝ nũꝫ ai ſuꝫ mnuta. Et hoc nõ mha mnuta quaſ illa q̃ aĩpõ mũ. Et ſubdmlãre ſuaꝫ ſua mnuta. Et mlẽ ſũ mnuta ſupioꝝ nũ pfecta mnuta ſ ſecũ. Et ſũma duaꝝ ſ mnuta uelꝫ nũ. ſub una ũgla. Et accipe q̃ ꝓbẽ duabꝫ nũo nũm ai mnutis mlãtacꝫ. Et q̃ uelꝫ ai dmoſtrandũ nũoꝝ melligibiliꝫ oſtendat.

De capitulum unpaſ ecto duodecimus.

Inqui ꝑma ẽſ dmlãre nũoꝝ integroꝝ ai uno rupto ſub una ũgla.

Scda dmlãre nũoꝝ q̃ ai duabꝫ q̃ rupis ſub una ũgula.

Tercia dmlãre nũoꝝ ai duabꝫ rupis ſub duabꝫ ungulis.

Quarta dmlãre nũoꝝ q̃ cum duabꝫ ungulis ai q̃libꝫ rupis.

Quinta dmlãre nũoꝝ cum tribꝫ unguli

Sexta dmlãre nũoꝝ ai rupto ſine ſaurl.

Septima dmlãre nũoꝝ q̃ rupꝝ quoꝝ ũgꝫ ũmanũ mẽſulo. Inq̃ ꝑs ꝑma

Octaua dmlãre ꝑtiũ nũoꝝ q̃ rupis. ꝺ̃ multa pducẽ numeroꝝ integroꝝ cum

Nouẽ mlãre 11 q̃ dumdiuiꝺ ꝑ 22 q̃ tũc uno rupto ſub una ungula;

ꝺcẽ maiꝰ nũm ſub minor. ſ ½ 22 ſub ½ 11 ubi oſtendẽ. ꝺ̃ ſic dumdiaꝺ ½ 11 in q̃ rupt̃ q̃ ai 11 ẽ medietas q̃ ſic fit. mlãb 11 ꝑ 22 q̃ ſub ũgla ꝑ ipa 11 q̃ ſuꝫ acꝺ q̃ ꝺcẽ ũgula ꝺ 22 ẽ medietas 22 uꝫ duplum ½ 11 cui 22 ꝺcẽ 22 ſi ½ 11 uꝫ ꝺcẽ ꝓ oſtenſ. cuiꝺ nõ mlãre 22 ꝑ ſuaꝫ ũgla. ubi ꝑ q̃ ſub ungla ꝑ 22 ei tue 66 aliq̃ acꝺe. q̃ ſit 22 ei tue 67 q̃ ſua ſit ½ 22 q̃ ſue ꝺcẽ mlãre ½ 22 q̃ mlãre dumdiaꝺ 22 ꝑ ſua 67 ei ſcẽ 134 qual dumdiaꝺ ꝑ ruptꝰ q̃ ſub ungul' aliorum nũoꝝ. ſ. ꝑ 44 q̃ duplo ſe ꝺcẽ mlãre 22 ꝑ 22 ei 66 mãbi dumꝺ 134 cuiꝰ mag. ½ 246 ꝓ ſũma mlãre ꝑ unu mꝰ ꝺcẽ ꝑcẽ ꝺmoſtrãꝺ. Ita q̃ ſit q̃ ꝑ mlãre me

ꝑ unu ꝑ tiã. ſ. ai accipiẽ medietas

dumdiuiꝺ 22 ꝑ 22 q̃ ꝓ uenit 1. Nouẽ ai ꝺmlãt medietas mlãre dumꝺ duplũ ꝺ ½ 11 ei 22 ꝑ ſua ½ 22 ſi ꝑ 67 ſũma ſimꝺ duplũ ſume mlãre ꝺcẽ ꝺmoſtrãꝺ. Et mlãre q̃ ꝺ ½ 22 ſi ½ 11 q̃ uenit ſũma q̃ſita. Qꝫ ſi mlãre ½ 22 ꝑ duplũ ꝺ ½ 11 bẽ ꝑ 22 q̃ uenit duplũ q̃ſue ſume. Et ſi mlãre ẽplũ ꝺ ½ 22 bẽ 67 ꝑ 22 ſ. ꝑ duplũ ꝺ ½ 11 numꝰ ẽplũ duplũ ꝺ ſpecialiũ ſume q̃ſue ꝓpoſite. Et ſcm tm̃ ſume mlãre ꝺcẽ ſũma q̃ſita q̃ ꝓpoſita ꝺmoſtrãꝺ. Et hoc q̃ꝫ mlãre 22 ꝑ q̃ñ ꝑ 22 q̃ dumꝺ ꝺcẽ ꝺcẽ dumꝺ q̃ mlãre 1 ſuꝫ ſi ſuꝫ ulẽ ꝺcẽ nũ ſuꝫ ulẽ ꝺcẽ nũ ſuꝫ. ſue ꝺcẽ hoc ꝺ̃ oĩbꝫ nũbꝫ quoꝝ mlãre aliã ꝺcẽ ulẽ ꝺcẽ. Virgila. ut ai ꝺbuiſ dumꝺ aliq̃ nũm ꝑ 22 ꝑ dumꝺ ꝑ ꝑ 10 q̃ ꝺ 22 hoc mlãre ꝑ 22 ſi ꝺbuiſ ũ̃ mlãre dumꝺ ꝑ 22 ꝑ dumꝺ ꝑ 22 ꝑ 10

½ ¼ quamp ⁊ ℔ . De eodem

Tem suoḡ mīcaue ½ ⁊ p ¾ ⁊ ⁊ dicbe qđm ū hoīes dūc. ⁊ mīb⁹ ⁊ p q̄ ꝑ sub
ūgla. ⁊ addo ⁊ dē sr̄ qđ ⁊ cr̄ meche ⁊ ℔] tē mīb⁹ ⁊ ⁊ p ⁊ q̄ ꝑ sub ūgla. ⁊ addo
⁊ q̄ ꝑ sr̄ qđ ⁊ cr̄ q̄nte 118 mīb⁹ ḡ mediag ⁊ ⁊ p q̄nt ꝑ 118 cr̄ meche q̄nte. ℔ ⁊
caue ⁊ ⁊ ℔ ⁊ q̄r duudes p ⁊ ⁊ ℔ ⁊ q̄ ꝑ sub ūgul. hēp 10 . ut debet ⁊ ⁊ ℔ ⁊ duudē
p 10 q̄ cr̄cupl⁹ d ½ ⁊ mq̄ cr̄ph⁹ ¾ ⁊ ⁊ ℔. d ⁊ ⁊ 118 ꝑ q̄nt cr̄upl⁹ mīcaue
d ½ ⁊ ī ¾ ⁊ ⁊ q̄ abē int ⁊ ⁊ ℔ ⁊ q̄ dūo alīo ut supl ī q̄ dē dmostauē . ꝑ⁹ ē sūma
tē mīcaūōl alr̄ repue. ℔ ut añ q̄ mīc ⁊ ⁊ ℔ 118 duud ⁊ ⁊ ℔ ⁊ ūgla ei p q̄ay
cōgue ponēb duudu. q̄ abē ⁊ q̄ sua ⁊ duud 118 p q̄ sub ūgla. cū eoꝝ mebrū
sic intez q̄ abē ⁊ ⁊ q̄ mīc ⁊ ℔ ⁊ ꝑ sua sue q̄nq pug d ⁊ ⁊ cr̄ ⁊ ⁊ ℔ q̄ sūma tē rō
catoīl ut supl repue ē. ⁊ b tē ē uacuo mīb⁹ ē q̄ dāda p q̄ cuaue lalez mīcaūō
⁊ duudū. q̄ ē mīcaue ⁊ ⁊ ℔ 118 q̄ ⁊ ℔ ⁊ q̄ mīcaūō. ℔. d ⁊ ⁊ ī ⁊ ⁊ ℔ ī q̄ꝝ
p aliq̄ tupeī duudē. ūū aī debuīt mīcaue aliq̄ mīp ꝑ aliq̄ mīo. ⁊ tē mīs
sūmā ulloī p aliq̄ mīo ut mīs duudē p q̄ ut ꝑ q̄l aliq̄ mīoꝝ ulloꝝ ꝑtīs ūgli
duudē stuebuī q̄p duudē tze quoꝝ ūgle duudē potīl aī q̄o mīez. dui mīb⁹ relcūo
mōnī admuīo. ⁊ duudes p supl ut ꝑ supl q̄ remanebō cōmuīo. q̄ mīo ꝑ⁹ ⁊
dmostauo ambuī. Si ꝑmū uolo dmostare uīa l'aiam uo ꝑbau. Quia cr̄ mīcaue
d ⁊ ⁊ 118 ꝑ q̄nt cr̄upli mīcaūōl d ½ ⁊ ī ¾ ⁊ ⁊ ut dīc ꝑ⁹ aīcedēs mīcaūō du
saui. ℔ cr̄ mīcaue ꝑ q̄nt ꝑ ⁊ ⁊ ℔ 118 ꝑ q̄nt cr̄ q̄nt duplū cr̄ mīcaūōl ½
ī ¾ ⁊ ⁊ ℔. d duudū cr̄ mīcaūōl q̄r sī mīcaū q̄nt ⁊ ⁊ ℔. ⁊ ꝑ duudū d 118 ꝑ ⁊ ⁊ ℔ ⁊
ma mlt̄plīcaū ½ ⁊ ⁊ ¾ ⁊ ⁊ ℔ De eodem

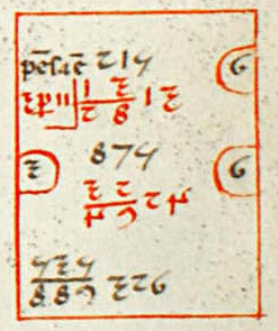
Rsū sī nobīl mīcaue ½ ⁊ p ¾ ⁊ ⁊ dīc q̄ mīs ut⁹ oēdēs. ois ca ⁊ ⁊ ℔ ⁊ q̄
sr̄ qđ ⁊ cr̄ meche ⁊ ℔] tē mīb⁹ ⁊ ⁊ p cōīs ūgla. b ⁊ ⁊ ℔ ⁊ addo ⁊ cr̄ sr̄ qđ ⁊ cr̄ q̄nte ⁊ ⁊ ℔ ī m
q̄ ⁊ ℔ cr̄ ūgulus p̄mus 7 oīz ⁊ ⁊ ℔ duud p ⁊ ⁊ ℔ q̄ ⁊ ⁊ ℔ q̄ sub ūgul potīl sī
ūgla sic ½ ⁊ abē int ⁊ ⁊ ℔ ¾ ⁊ ⁊ ℔ ⁊ ⁊ ℔ ⁊ ⁊ ℔

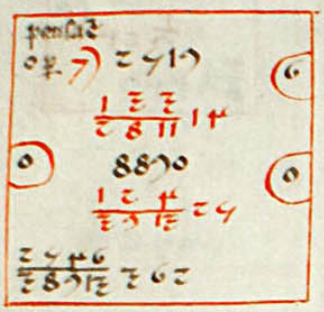
mlcanstu r 1 p 1 7 debunstu cogloe pcela si eoz mlcanto ita eet. Et cabunstu summa
s. 1/2 5/7 1 7 7 obunstu cogloe sili fm q supi dmostrauim sulla duntio recta eet. Dode
Cenu si uolunt mlcare 1/4 1 6 p 5/7 1 7 d scpta qoe. ost. 1 6 p eoz ugla. s. p r 7 add 1 et
gire 6 4 q nuim ptia p pcela sic. ut si pcela septenaz phat uolunt. duntes 1 6 p
7 remanebit 1 q mlca p r d ugla 7 add 1 qe sr r et q duntd p 7 remanet 1 7
tot debet remane d 6 4 si duntde p 7 7 tot remanz. Et pela d 6 4 e 1 q sua sr 6 4
dni mlca 1 7 p eoz ugla et qnte 1 7 qt poe sr 5/7 1 7 7 und pcela d 7 si ipa 1 7 ita
sit sicut uduta d 6 4 7 repies q pela d 1 7 debz eo r 7 ita e qz si duntur 1 7 p 7
numu r remanebit. qz sua p r sr 1 7 p ipoz pela. dni mlcab 6 4 p 1 7 et uge
sunt 8 9 0 4 Et mlcato si recta fuit. ita p ead septenaz pela cogloz. mlcab sua ta
pela d 6 4 . s. z p pela d 1 7 q e r et 8 q duntd p 7 remanz 1 7 tot debz remane d 8 9 0 4
si duntde p 7 7 ita sit. Vn cogsam q sta e illa mlcato. Jden dunt 8 9 0 4 p tuptos
q 9 sub ugul. h e p r 7 p 4 positol sub una ugla. Tam dunt pul p 4 io qz 8 9 0 4 ite
gir p 4 duntde ecbt 0 1/4 r r 4 plima q sit mlcatol. Que duntio si recta e tad
ut cogloe duntd r 1 4 p 7 remanz r Que mlca p r q 9 sub ugla p ipa r r 4 add
1 qe sr ipa r et 1 7 q duntd p 7 remanz 1 q mlca p 4 q 9 sub ugla p r 7 add e zeph.
q e sr 4 et 1 4 q duntd p 7 remanz 1 q 1 ai sit pela d 8 9 0 4 sam q plepta duntio recta
e. Et sicut qz 4 q sub sub ugla duntiol p r ai sr ipa sit o mob repentar. Et de
septa mlcato e 1/4 r r 4 Positum e ipa 4 sub ugla ut mencmet pela. Alie pmo
pot hoc eade mlcatom cautam repire. s. ut duntal 6 4 repta p 4 q sr sub ugla. et
be 1 7 q mlca p 1 7 7 duntd p r d alia ugula. ecbt sit 1/4 r r 4 ut supi repta sit
lla sep ai debem aliqe mim p r 7 p 4 duntde. h e p 1/4 0/4 si ipe nil but 1/4 gsidera
m ipm pt p 4 q p r duntde pp intega ipi duntiom sicut mo fecam d 8 9 0 4 Et si
nil ipe p r integlr duntr. gsideum ipm pt p r qua p 4 duntde. Et si nil ullo nz
p r nz p 4 integlr duntd possit. gsideum m ipz duntde p 1/2 0/10 io qz q tuor q nq fa
cunt 2 o q r e 1/2 0/10 Et h facam pp pulchuoe locuom. qz pulat e dce 1/2 0/10 q 1/4 0/4
qua ms ide sit. s h debet intligi deqbz da alus nil. s. ai debut duntde aliq nim
p 2 7 p r h e p 1/2 0/4 q nil n duntat p aliq ipoz integlr duntes eu p 1/2 0/6 q e pul
ai. Jte ai debut duntde p r 7 p r h e p 1/4 0/4 duntel eu p 1/2 0/8 Et ai debut duntde p
2 7 p 6 h e p 1/2 0/6 duntes p 1/2 0/9 io qz tiy facet mlcato d 2 i 9 qnti d 2 1 6 Jte ai de
but duntde p r 7 p 6 h e p 1/4 0/6 duntel p 1/2 0/8 Et ai debut duntde p 1/4 0/6 duntes p
1/2 0/10 Et ai debut duntde p 1/4 0/8 duntel p 1/4 0/10 Et ai debut duntde p 1/6 0/6 duntes p 1/4 0/9
io qz utq ptiq ugla. s. 1/6 0/6 7 1/4 0/9 e regla d 2 6 sz nos dnu ni pl externos nuq
q 9 adee 7 nsa. i opotoby muoz. 7 io pulat e 1/4 0/9 qua 1/6 0/6 Et h de intligal deice
dtby. Vm si duntde uolunt aliqe nim p aliq alios nuq nim decenaul exsteiq. pt
hoc quoq supi decum coaptare. ai ipi coaptan n possit. duntes ipm p ipoz. ut si debuq
duntde ea p 4 q p 7 duntes ipm p 1/4 0/7 7 hic intelligal d reliquis.
Rvelut si uolunt mlcare 2/8 1 8 p 5/9 r 4 d septa qe mlca 1 8 p eoz ugla. h e p 8 7 add 2
et 1 4 7 Jte mlca 2 4 p 9 7 add 4 et 2 2 o Que mlca p 1 4 7 7 dunde p ruptos ecbt

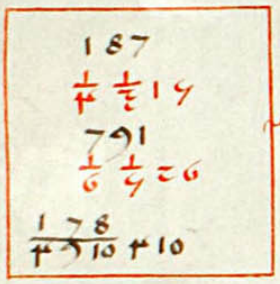
quor pela ē o p 11 Alia d 1/8 1/3 q pars est unius tregi seue uolunt. mca 1 q ē sit 3 p 8 7 adde 4 er 12 q sua p nia duoiantur. 7 mca 3 p 8 q̄ sub ugla er 7 2 p dno manso q duud p suam 12 erabt 6 d q̄bz 6 ducas 1/6 7 mal pars ē 12 d 7 2 silr mal 1/8 3 ē 1/6 unius tregi. Dica ḃ pulsus q ex mcatōe d 8 i 3 sunguntur fiet septuagesimal sal d u 7 2 no tregi er 7 2 d q̄bz acc nona 7 q̄tuor octaual unius none er 8 7 4 s. 12 ubent ex mcatōe d 1 q̄ ē sit 3 i 8 actus 4 q̄ sit. 8 Ergo 1/8 1/3 fiunt 12/72 Cui proportio d 1/8 1/3 ad unū integr ē sic 12 ad 72 Cui proportio d 12 ad 72 ē sic proportio duodecimo partis d 12 ad duodecima partis d 72 hoc ē d 1 ad 6 q ut in euclid reperit sic tue ad totū ita pars ō ad partē. ē ō d 6 septa pars q̄ habet p suam proprietatem mcationis d 1/6 4 4 3

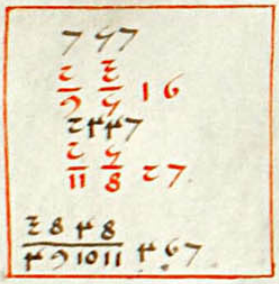
Hic possum hoc eid summā cumulū reperio. Cui ai debeat mcatōe 1 4 7 p 2 7 2 3 pa duodē p 8 7 p 3 ostēsa tōi totā partē d 1 4 3 q̄ē 4 3 p q̄rtā partē d 2 7 2 0 hoc p 4 7 7 duudecī summa partā partē d 3 hoc p 2 7 q p quātū d 8 hoc p 2 Ergo duudecī cor summa p 6 erabt 1/6 4 4 3 ū supi reperū ē Et nota ai nūl d noiant communicat. ai d noiato. s. nūl q̄ē sit ugā ai nūo q̄ē sub ugā tō debēt aptari duudēdo col p maiorē numm q̄ē communi utlqz aq̄ upi 3 communicātes. Vbi gdā hēm 5/3 sit ē 6 ai 3 communicāt cel. 7 ē cor coīl nūlum tuum. Cui duudes utriq; cor p 2 7 q̄ ex duuliorē supiorū puenit. s. 2 poēo sit q̄dā ugā. 7 q̄ ex hac duuliorē i flong pōz. pōz sub upā 7 hēb 5/2 p 5/3 Jtē d 5/10 ē q̄nau. s. nūl d noiant coīl nūlum cor. Cui si duudas utriq; nūi p 4 s. 4 7 10 puenet 1/2 p aptatōe d 5/10 7 h mediagal in silibz. Est ē mod immediū maximā coīmuō quā ite solūt nū coīam cel. ut duudas maiorē p minorē. 7 si ex pū duuliorē nich supmāt. tē minor nūl est maxia cor coīl nūlum uel 12/72 7 si ex pū duuliorē aliq̄d sit fuit. sua illud p residuo pmo in q̄ duudecī in nouē numm ex q̄ duuliorē si nich supfuit tē residuū pmū erit coīl nūlum minor ui 10/72 quor coīl nūlum ē 2 qi duuliis 72 p 10 remanet 2 q̄bz 10 integr duudēt. 7 si ex duuliorē minoris nūi p pmū residuū aliq̄ supfuit uocab illud residuū fm in q̄ si minor nūl integrat duudat. tuū residuū fm erit coīl nūlum minorū ut i 12/10 q̄r coīl nūlum ē 2 qi duuliis 10 p 12 remanet 8 i q̄bz duuliis 12 remanet 4 i q̄bz 12 integrat duudēt. 7 si ex duuliorē maioris nūi aliq̄ supfuit uocab ei residuū tertii in q̄ duudecī maiorē numm. 7 sic sep facies donec aliq̄ residuū puenat in maiori nūo p q̄ integrat duudat minor. ut donec in minori puenat residuū p q̄ duudat maior. 7 illud residuū erit coīs nūlum 7 maxia. ut in euclid aptis demostrationib; declarat. Explat pās pma septi capli

Saui 12 7 tres octaual 7 dimidiū unius octaue sunt capit sedā d mcatōe nūor ai plib; rupis sub una q̄ sic sebuit 1/2 7/8 12 uolunt mcate p 4 7 duos nonas. 7 tres q̄tas unius none q̄ sic ugula sebuit 7/4 2/3 2 4 d sebo q̄ñ ut h ostēdit. Et mca 12 p 8 7 adde 2 er comune 10 7 mca p 2 q̄s sub ugla p 8 7 adde 1 q̄ē sit upa 2 er septedecime 1 4 q 2 7 8 q̄s sub ugla unius mcate fuerit 16 pē g 1 4 sit 1/2 8 12 fiunt mca 2 4 p eorū ugla. s. p 3 7 adde 2 q̄s sit 3 er none 2 18 q̄ p 4 q̄s sub ugla p 3 7 adde 2 q̄s sit 4 er 8 7 4 tdecime septe q̄s pē sit 7/4 2/3 2 4 7 mca 2 14 p 8 7 4 7 duud p nias q̄s sub uguī utriq; nūi. hoc ē p 1/2 4 8 3 ut p 1/8 8 3 q̄ē pulsus erabt 2/8 8 3 2 2 6 7 sic potest mcate p q̄lib; numm ai duob; ruptis sub una ugla p q̄dib; numm ai duob; ruptis sub alia. Jtē si







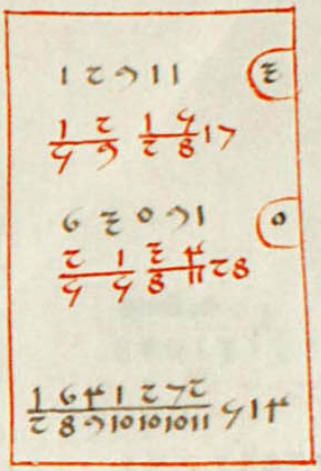


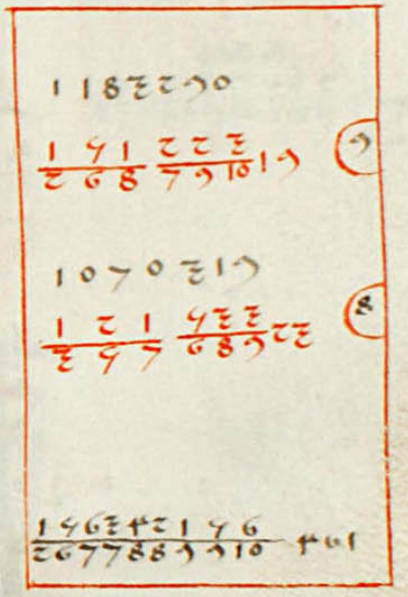
.s.181 .p alio modo reliquos $\frac{1}{8}$ d ugla. C mlb 77 p 181 q dimidos sum a p reliqs mios q sit sub ugla .s. p $\frac{1}{2}\frac{0}{9}$ erit $\frac{1}{2}\frac{3}{9}$ r 81 p q sit mlcce. e sum plu accipies exp d 77 q d 181 ai cui mlom sum a sit dimsa. Na p $\frac{3}{9}$ ducos $\frac{1}{2}$ p $\frac{1}{2}\frac{3}{9}$ ducos $\frac{1}{2}$ q tna none. Jte hem iq ugis b $\frac{2}{4}\frac{2}{6}\frac{2}{8}\frac{4}{10}$ q.s. pnitis ita p $\frac{4}{10}$ ducos $\frac{1}{2}$ q p $\frac{2}{8}$ ducs q rta decie. q p $\frac{2}{6}$ ducs dimidi octane decie. q p $\frac{2}{4}$ ducos dimidi seste octane decie. q b ongt p oitates q.s. hic sup iorib; nti ai in fioribs. Et nota d q mlce sitates q.s. sub duis sis ul gis possit reduci ad una ugam .s. ad pates uni nti ut in suo dno scdo leco. si b q hic duc sitates q.s. sub duabs unguis q ugue duis nocti dno scdo .mlb nis q sint sub pma uga p nim q sint sub su. q q.s. pueniet pos sub qda uga. dni mlb nim q e sr pma uga p nim q e sub su. q nim q e sr su mlb p nim q e sub pa q sic duas mlos ongos q q.s. pueniet pos sr uga q lib oportu. Vbi gra uolumi addi $\frac{1}{2}$ ai $\frac{2}{9}$ mlca t p 4 q.s. sint sub ugis e 10 q pe sub qda uga q mlca 1 q e sr t p 4 q t q.s. sr 4 p t q.s. ugam e 4 q .s. q pe sr uga q lib $\frac{2}{10}$ p $\frac{2}{4}$ $\frac{1}{2}$ Jr fac dno ito dca e decie 10 q.s. p $\frac{1}{2}$ lebue $\frac{4}{10}$ q p $\frac{2}{4}$ lebue $\frac{4}{10}$ q sic p $\frac{1}{2}$ q $\frac{2}{4}$ bnt $\frac{2}{10}$ ut pdixi. Et qa uls p os duos medos possuo quelibz duc sitates duas ugas ad una reduca uga ta qlue in sitatib; q bnt sub ugis nis oitates sub alq prde adcedo. Vt si uoluis $\frac{2}{9}$ $\frac{1}{2}$ i una uga reduco q t q q.s. sub ugis oiat is se q e tna. oi oiatio duid unu ex pis nti .s. t ut q t .s. p eoi comune msura q d pueniet mca palu nim. q pueniet p nio dnoiato. Vbi gra. mca q ta pte d t .s. 1 p ut mca ta ta pte d p t mim ex sub; mlce pdas q pueniet pas ea sub qda uga q mca 1 q e sr t p ta pte de q e t q sua manu q mca t q.s. sr q p ta pte d t .s. p 1 e t q adde ai t sua ai 4 q pe sr uga sub q poita .s. q lib $\frac{2}{9}$ p $\frac{2}{9}$ $\frac{1}{2}$ Jte uolum addi $\frac{2}{6}$ $\frac{2}{4}$ q binas e oig d 4 q d 6 mca dimidi d 4 p 6 ut dimidi d 6 p 4 ut ace dimidi mlois d 4 i 6 q lib 12 q pe sub qda uga q mlb sit q.s. sr 4 p dimidi d 6 q.s. sr 6 p dimidi d 4 q lib q 10 q in simi nige e 12 q q ponedo e sr 12 pnt sub uga si ee mis q 12 .s. q p dimidi 12 p 12 erit $\frac{2}{12}$ 1 p pnia ee d $\frac{2}{6}$ $\frac{2}{4}$ Et nota ai sub duabs ugis ponit nti oiatis ut ex p mlce ni pueiat ulr de e pdicta dcia delet ipas sitates reduce ad una uga q ipas hic leco illas duas ugas ut in scdo libro dno stabo. Sz ponia pi in sub sept tabul duas sitates .s. aptare debet q an erit pi aptates eas p sapia $\frac{1}{2}$ q $\frac{1}{2}$ q.s. 1 dis scdo $\frac{1}{2}$ $\frac{1}{2}$ q.s. $\frac{2}{6}$ q ceti q i scdo libro tabul d sarbuit.

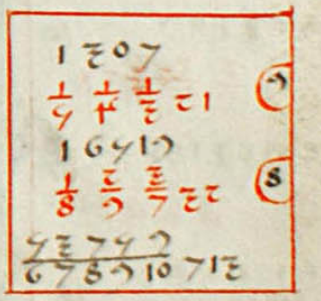
$\frac{1}{2}$	$\frac{1}{2}$	1 simo	$\frac{1}{2}$	$\frac{2}{4}$	$\frac{1}{10}$ 1 simo	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{2}{8}$ 1 simo
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{2}{9}$	$\frac{1}{2}$	$\frac{4}{4}$	$\frac{2}{10}$ 1	$\frac{1}{2}$	$\frac{1}{10}$	$\frac{2}{4}$
$\frac{1}{2}$	$\frac{2}{2}$	$\frac{1}{9}$ 1	$\frac{1}{2}$	$\frac{1}{9}$	$\frac{2}{2}$	$\frac{1}{2}$	$\frac{2}{10}$	$\frac{4}{4}$
$\frac{1}{2}$	$\frac{1}{4}$	$\frac{2}{4}$	$\frac{1}{2}$	$\frac{4}{9}$	$\frac{1}{2}$ 1	$\frac{1}{2}$	$\frac{7}{10}$	$\frac{1}{4}$ 1
$\frac{1}{2}$	$\frac{2}{4}$	$\frac{1}{4}$ 1	$\frac{1}{2}$	$\frac{1}{8}$	$\frac{2}{8}$	$\frac{1}{2}$	$\frac{2}{10}$	$\frac{2}{4}$ 1
$\frac{1}{2}$	$\frac{1}{4}$	$\frac{2}{10}$	$\frac{1}{2}$	$\frac{2}{8}$	$\frac{2}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{2}{2}$
$\frac{1}{2}$	$\frac{2}{4}$	$\frac{2}{10}$	$\frac{1}{2}$	$\frac{4}{8}$	$\frac{1}{8}$ 1	$\frac{1}{2}$	$\frac{2}{2}$	1

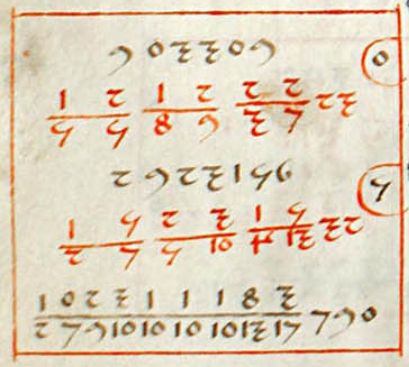
1	1	1
1	1	1
1	1	1

Sunt itaq; plenti ungtaũ atta roĩbz ꝙ ponat mlt'are ½ ½ 11 p ¼ ⅛ 22 mlt'ab
¾ 11 p 7/10 22 silr si unt mlt'are ¾ ⅓ 12 p ½ ⅔ 22 add pmũ ⅔ aĩ ¾ ei ⅞ 1 hẽ ½ 6 1 ꝙ
adde aĩ 12 ei ½ 6 12 silr add ⅔ ⅓ ei ⅔ g mlt'b ½ ¾ 6 12 p ⅞ 22 ꝙ sic ũtligat unsulibz
Sunt mlt'are 17 ꝙ q̃nqz octauaz ꝙ dimidiaz octaue ꝙ dual nonaz ꝙ quĩa ꝑ ꝑ q̃rta
none p 12 8 q̃ttuor ũdeciaz ꝙ tres octauaz. xĩ. ꝙ q̃ntã. ꝙ dual q̃ntal q̃nte. scde nuõz
ut ĩ margine ẽnt'. ꝙ mlt'a 17 p q̃ ꝑma ugã. s. p 8 ꝙ adde 4 q̃ trui p 12 ꝙ adde 1 ei 12 82
q̃ mlt'. p nuõz q̃ st' sub su uga. s. p ⅔ ꝙ illud trui p 4 ei 12 7 ⅔ 4 nõ plus ĩ recte. mlt'a
su. s. pẽlã d 17 q̃ ẽ 7 p septenariũ mlt'. p pẽlã d 8 q̃ ẽ 1 ꝙ adde 4 q̃ş sĩr 8 quor pẽla. s.
1 mlt'a p 12 ꝙ add 1 q̃ ẽ sĩr 12 ei 7 q̃ş pẽla d 12 8 7 q̃ mlt'a. p pẽlã d ⅔ ei 6 q̃mlt'. p 4 q̃ st'
sub uga ei 20 quorũ pẽla ẽ. s. 12 ẽ pẽla muẽtũ mũ. s. d 12 7 ⅔ 4 d uĩ mlt' 7 q̃ sĩr ⅔ p 4
ꝙ add 1 q̃ ẽ sĩr ipã 4 q̃ p 12 q̃ p 8 q̃ş sub ꝑma uga ei 176 d q̃bz accipe. plã sic mlt'a.
12 q̃ş sĩr ⅔ p 4 ꝙ adde 1 ei 11 q̃nũ. plano. s. ꝑ mlt'. p 12 ei 8 q̃rtũ. pla q̃ ẽ 1 mlt'. p. plũ d
8 puenet 1 ꝙ tot debz ee. pla d 176 ꝙ quia ẽ sam 176 trecta cẽ. adde g ea aĩ 12 7 ⅔ 4
ei 12 911 quoniã plus ẽ 7 q̃ puenit exactius cẽ plus uicesies nuõz. sua g ea sĩr 17
studiũ ordinis eode mlt'are 12 8 p sual ugal ꝙ puenet 6 ⅔ 20 91 sua g sĩr 12 8 ꝙ plus
eorũ silr q̃ ẽ 0 ꝙ mlt'. 12 911 p 6 ⅔ 20 91 duud p 9 nuõz q̃ş sub ꝑ ugtl ꝙ apta ugtãm
ꝙ hẽb q̃liã sũmã ut ĩ qõe ostẽdit ẽ sũme pla ẽ q̃ pueĩt exactissĩe sua cuiꝫ pla cuiꝫ
ĩse. Rursus sunt mlt'are ½ 4/6 ⅛ ⅔ ⅔ 7/10 19 p ½ ⅔ ¼ ⅐ 4/6 ⅞ ⅔ 12 ꝙ mlt'.
20 p sual ugulas. s. p 10 ꝙ adde 12 q̃ş sĩr 10 q̃ 20 ꝙ adde 12 q̃ş sĩr 20 q̃ 7 ꝙ add 12 q̃ş sĩr
7 ei 12 1764 q̃ mlt'. p. 8 q̃ 6 q̃ 12 q̃ş sub su uga ei ei 1168800 quoꝫ pla p pẽlã d
11 ẽ 6 sua ea ꝙ mlt'a 1 q̃ ẽ sĩr 8 p 6 ꝙ adde 4 q̃ sunt sĩr 6 q̃ 12 ꝙ adde 1 q̃ ẽ sĩr 12 ei 12 ⅔
q̃ mlt'. p 7 q̃ 20 q̃ 10 q̃ş sub ꝑma uga ei 1 ꝑ ꝑ 20 quoꝫ pla p 11 ẽ ⅔ add g 1 ꝑ ꝑ 20
aĩ sua tũ 1168800 ei 1185 ⅔ 20 quorũ pla ẽ 20 ut colligit ex 6 ꝙ q̃ş ple
norũ decoꝫ nuõz. ost g 1185 ⅔ 20 p 10 7 ⅔ 20 q̃ puenit exactissĩe 12 ⅔ ĩ sua ũgtãm
ꝙ eorũ pla p 11 ẽ ꝑ ꝙ duudes sũmã p nõz q̃ş sub õibz q̃ttuor ugtũ. ut si uis autem
coĩtatel q̃l hẽt nũ mlt'atel aĩ duudẽnbz. acẽ 1/10 d 1185 ⅔ 20 ꝙ decia accipies p̃
tua pte uenient 7 20 ꝑ ꝑ 7 silr duud 1064 86 q p 7 ei 7 4 20 4 q̃ mlt'. p
5 7 20 ꝑ 7 duudes sũmã p nõz nup tos p̃dictos exactissĩe cecidi ½ 0 7/10 hõ 1 0 10 ꝙ stu
deb aptare nup tos ordinẽ sto. ꝙ hẽb q̃liã sũmã ut ĩ qõe ostẽdit. Et si ipã pla uelit
uoluit mlt'are pla d 7 20 ꝑ ꝑ 7 p pla d 7 4 20 4 ꝙ hẽb pla q̃lite sũme. Incipit
Sunt mlt'are 12 ꝙ ½ ꝙ ¼ ꝙ ⅛ p 12 ꝙ 7/10 ꝙ ⅔ ꝙ ⅞ d'cde nuõz ut in margine p̃t q̃nta
cuiꝫ ꝙ mlt'. 12 p 7 ꝙ add 1 q̃ ẽ sĩr 7 ei 64 q̃ ꝑ ꝑ q̃ş sub ũgtl ut in una mlt'ẽ mlt'
64 ꝑ 20 ei 12 80 septuagesie ꝙ 1 q̃ ẽ sĩr ꝑ q̃ ẽ quarta. mlt'. p 4 q̃ş sub tua uga q̃ p
7 q̃ş sub ꝑma ei septuagesime 14 Jte 1 q̃ ẽ sĩr 4 q̃ ẽ q̃nta mlt'a p ꝑ q̃ st' sub su uga. s
p 7 q̃ş sub ꝑma ei sexagesime 12 adde g 12 80 ꝙ 14 ꝙ 12 sexagesimal ei septua
gesime 12 07 ꝙ tot sexagesiẽ sunt ĩ ½ ¼ ⅔ 12 1 quorũ pla p 11 ẽ 4 q̃ hẽc ordine q̃
mlt'ant mũ. Silr fac sua minuta d ⅛ ⅔ ⅔ 22. s. mlt' 22 p 7 ꝙ adde 7 q̃ş sĩr 7 q̃ p 4
ĩ p 8 ei 168 ꝑ ꝑ q̃ngẽsime q̃rte. Jte 7 q̃ş sĩr 4 mlt'. p 8 q̃ p 7 ei 11 7 silr q̃ngẽte
sime q̃rte. Jte 1 q̃ 8 sĩr 8 mlt'. p 4 ei 4 septuagesime se q̃l mlt'. p 7 ei 6 ⅔ q̃ngente









ugas ordine q̄ mlcasti 25 p suas uel est 2925146 sua ea cū corp pēsa q̄ est 4 sr 22 7
mlca 9025209 p 2925146 7 diuid p ōs nuōs q̄ s sub ugis. s. p̄mū pp ciuitatōz q̄ si
pōt diuid 9025209 p 5 uelet 5011025 7 diuid 2925146 p 4 uelet 7507859 q̄
mlca p 5011025 7 dele d diuisione 5 q̄ s sub p̄ma sr̄iorz 7 4 q̄ s sub p̄ma uga ifiorz 7 re
liq̄s nuōs apta sub una uga. q̄ aptatō ē $\frac{1\ 0\ 0\ 0\ 0\ 0\ 0\ 0\ 0}{2\ 7\ 9\ 10\ 10\ 10\ 10\ 15\ 17}$ 7 sic hēb sūma q̄si
tā ut i q̄ē ostēdit. Et q̄ hāc sūma hūsta ex diuisione nūi p̄cati ex mlce d 5011025 p
7507859 debes pēsā ipi sūme hāc ex mlce d pēse 5011025 q̄ ē 0 i pēsa d 7507859 q̄ ē
4 q̄r ē sūme pēsa sr̄ 0 q̄ mlo 0 p 4 fac 0 **D eodē cū trib; ugis sub unaq; uirga.**

Item si tres ruptos sub una q̄; ugla ponē uolūs ut i hac i q̄ ponit mlo d $\frac{1\ 2\ 1}{3\ 4\ 4}$ $\frac{1\ 2\ 3}{2\ 9\ 10}$ $\frac{1\ 1\ 6}{2\ 7\ 17}$ 11
m $\frac{2\ 4\ 1}{3\ 6\ 7}$ $\frac{1\ 2\ 2}{4\ 7\ 9}$ $\frac{1\ 3\ 3}{2\ 8\ 10}$ 22 d scripta q̄ē mlb 11 p p̄ma suā ugla er 2704 q̄ mlca p
ōs nuōs q̄ s sub alus fi duabz ugul er 3641740 0 q̄ sua 7 mlca 3 q̄ s sr 10 d sa ugla
p 9 7 adde 2 q̄ mlca p 2 7 adde 1 er 49 q̄ mlca p nuōs q̄ s sub alus duabz ugul. s. sub
tia 7 sub p̄ma er 1045140 q̄ sua d m acc nūm tie ugle. s. mlt 1 d ē sr 4 p alia 4 q̄ s
p ipa. 7 add 2 q̄ p 3 7 add 1 q̄ er 22 q̄ mlt. p ōs nuōs q̄ s sub alus duabz ugul. s. sub sa. 7
sub p̄ma er 9422480 adde g 9422480 cū 1045140 7 cū 3641740 0 er 3841340 q̄
pōe sr 11 7 suas ugulas d m mlt 22 p suas ugulas sicut m mlcasti 11 p suas. er i summa
1452887 10 q̄ pōe sr 22 7 suas ugulas. 7 mlt 3841340 p 1452887 10 7 diuid p ōs ruptos
q̄ s sub oibz ugul. 7 hēb sūma q̄site mlcatōis. Nā si ciuitate uoluūs ea q̄ m ciuitatē pōt
diuid 3841340 p 10 q̄ s sub sa ugla i sr̄iori latē. ideo q̄ integlr potes si. exibit 3841343
q̄ diuid p 3 q̄ s sub tia ugla supioris nūi exibit 1283771 q̄ sua ubi ideo q̄ n̄ posset diuidi
p aliquē nūz existētē sub aliq̄ sr̄ sex ugulas. 7 reliquos q̄ n̄ diuid p 3 n̄ p 10 i q̄bz
diuisiōs d m diuid 1452887 10 p 10 q̄ s i p̄ma ugla i sr̄iorz nūi. 7 p 7 7 p 9 q̄ s
sub sa ugla. q̄ i eis integlr diuidi pōt exibit 2406 17 q̄ mlt. p 1283771 er 2960494 16707
q̄ diuides p ōs alios nuōs q̄ s sub p̄scriptis ugulis. s. p $\frac{1\ 0\ 0\ 0\ 0\ 0\ 0\ 0\ 0\ 0\ 0\ 0\ 0}{2\ 2\ 2\ 3\ 4\ 4\ 6\ 6\ 7\ 7\ 8\ 9\ 17}$
q̄s apta s in sr̄ aptādi modū exibit $\frac{1\ 2\ 1\ 0\ 1\ 3\ 9\ 4\ 0\ 4}{2\ 7\ 7\ 8\ 9\ 9\ 10\ 10\ 10\ 17}$ 274 p sūma
q̄site mlcōis.

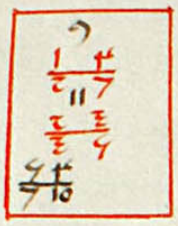
Expcit pars quīta sexti capli. Incip d mlcatōe ruptōr sn̄ sūs :: sexta

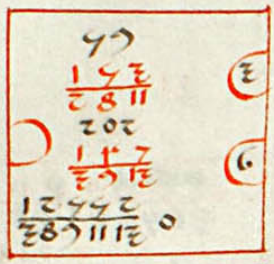
Si uolūs mlre $\frac{1}{3}$ p $\frac{1}{4}$ mlt 1 d ē sr 3 p 1 d ē sr 4 erit 1 d diuid p 3 7 p 4 q̄ s sub ugla. hēc p
$\frac{1\ 0}{3\ 4}$ ul p $\frac{1\ 0}{2\ 6}$ exibit $\frac{1\ 0}{3\ 4}$ ul $\frac{1\ 0}{2\ 6}$ hēc una pās d xii. pātibz unī integr. nā potes cognoscere q̄ s
ē si mlcauūs $\frac{1}{3}$ p $\frac{1}{4}$ q̄ntū si accepis $\frac{1\ 0}{3\ 4}$ ul $\frac{1\ 0}{4\ 3}$ 7 hēc id intelligas d oibz ruptis. q̄ sēp mlcō
rupti i q̄uelibz rupto fac q̄ntū acceptō unī ulorz ex alie q̄ cū mlcat 1 p $\frac{1}{4}$ tū semel accepit
$\frac{1}{4}$ g cū mlcat tia p q̄ntū tē accipit tia q̄rte. 7 sic ex mlcōe d tia in q̄rta p̄uenit. xii.

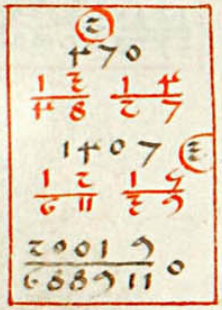
Item si uolūs mlre $\frac{2}{3}$ p $\frac{3}{4}$ mlt 2 q̄ s sr 3 p 3 q̄ s sr 4 er 6 q̄ diuid p 3 7 p 4 q̄ **D eodem**
sunt sub ugul. exibit $\frac{1}{2}$ unius integr. **De eodem**

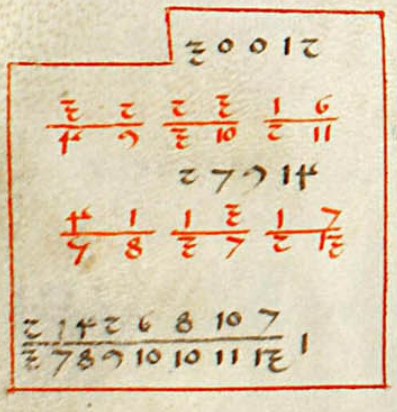
Item si uolūs mlre $\frac{3}{7}$ p $\frac{4}{9}$ mlt 3 p 4 q̄ s sup ugul er 12 q̄ diuid p 7 7 p 9 q̄ s sub ugul. ex
bit $\frac{4\ 1}{7\ 9}$ unī integr. hēc xii. pātes d sexaginta ibz pātibz unī integr q̄ s q̄tuor pātes d 21 tertiū
integr. Et hic uicies duplia sūt. P̄mū q̄d modū ē ut diuidas 1276 3 p 3 ideo q̄ hāc diuisiōs
unī q̄sq; eorū integlr recip. exibit 4 7 21 unī si diuisis 4 p 21 exibit $\frac{4}{21}$ unī integr. Vl alr
diuisi diuide 12 p $\frac{1\ 0}{7\ 9}$ diuid p 12 p 3 exibit 4 sil diuid 9 p 3 exibit 3 i q̄bz etiā 7 i 7 diuid
4 exibit $\frac{1\ 1}{3\ 7}$ hēc septima pās unī integr. 7 i sr̄ tia pās ipi septiē pātis q̄ tm ē q̄ntum

pensa est 10 p 11
3841340
$\frac{1\ 2\ 1}{3\ 4\ 4}$ $\frac{1\ 2\ 3}{2\ 9\ 10}$ $\frac{1\ 1\ 6}{2\ 7\ 17}$ 11
1452887 10
$\frac{2\ 4\ 1}{3\ 6\ 7}$ $\frac{1\ 2\ 2}{4\ 7\ 9}$ $\frac{1\ 3\ 3}{2\ 8\ 10}$ 22
pensa est 10
$\frac{1\ 2\ 1\ 0\ 1\ 3\ 9\ 4\ 0\ 4}{2\ 7\ 7\ 8\ 9\ 9\ 10\ 10\ 10\ 17}$ 274









quatuor partes d' 1

De eodem cū trib; rupt' sub una ungula

Si uolūt' mitte $\frac{1}{2}\frac{1}{7}$ p $\frac{2}{2}\frac{2}{4}$ d'cle qōm ut b ostēdit. & mlt' 4 q̄s sit' 7 d' suon ūgl'a. p 2 q̄s sub eād ūgl'a. & add' 1 q̄ē sit' 2 er' 3 q̄ poē sit' $\frac{1}{2}\frac{1}{7}$ sibi' mlt'a 2 q̄s sit' 4 d' unā ion ūgl'a p 2 q̄s sub eād ūgl'a. & add' 2 q̄ sit' sit' ūpā 2 er' 11 q̄ poē sit' $\frac{2}{2}\frac{2}{4}$ & mlt' 3 p 11 er' 33 q̄ duūdet p 2 & p 7 & p 2 & p 4 que ꝯ sub ūgul' exibt $\frac{4}{7}\frac{1}{10}$ unī ūngl'. D' eodē cū trib; rupt' sub una ungula

Item si uolūt' mitt'e uel rupt'as sub una ūgl'a p 2 as rupt'as q̄ sit' sub alia ut dicam'. $\frac{1}{2}\frac{4}{8}\frac{2}{11}$ p $\frac{1}{2}\frac{1}{3}\frac{2}{12}$ d'cle qōm & mlt' 2 q̄ē sit' 11 p sua ūgl'a. b ē p 8 add' 4 que p 2 & add' 1 ē 4 3 que poē sit' $\frac{1}{2}\frac{4}{8}\frac{2}{11}$ dūi mlt' 7 q̄ē sit' 12 p sua ūgl'a. b ē p 3 & add' 2 q̄ p 2 & add' 1 erūt 2 & q̄ poē sit' $\frac{1}{2}\frac{4}{3}\frac{7}{12}$ & mlt' 4 3 p 2 & 0 7 & duūd' p ōs nuōs q̄s sub utāz ūgl'a quoꝝ aptato ē $\frac{1}{6}\frac{0}{8}\frac{0}{3}\frac{0}{11}\frac{0}{12}$ exibunt. $\frac{2}{6}\frac{2}{8}\frac{4}{3}\frac{4}{11}\frac{2}{12}$ D' eodē cū duab; ūglis.

Si uoluūs mitte $\frac{1}{4}\frac{2}{3}$ p $\frac{1}{6}\frac{2}{4}$ d'cle qōm ut h ostēdit. & mlt' q̄s sup' 2 p 4 q̄s sub sua ūgl'a er' 8 ꝯ mlt' 1 q̄ē sit' ipā 4 p 2 q̄ sup' sub p̄ma ūgl'a er' 2 q̄ add' ai 8 er' 11 q̄ poē sit' $\frac{1}{4}\frac{2}{3}$ dūi accedat ad $\frac{1}{6}\frac{2}{4}$ & mlt' 2 q̄s sit' 4 p 6 & 1 q̄ē sit' 6 p 4 & add' unū & mlt' er' 2 2 Q' poē sup' $\frac{1}{6}\frac{2}{4}$ & mlt' 11 p 2 2 er' 2 4 2 q̄ duūd' p ōs nuōs qui sūt sub ūgul'. D' eodē cū duob' rupt'is sub una ūgl'a

Si uolūt' ponē duas rupt'as sub una q̄q; ūgl'a. ut $\frac{1}{4}\frac{2}{8}$ $\frac{1}{2}\frac{4}{7}$ cū $\frac{1}{6}\frac{2}{11}$ $\frac{1}{2}\frac{4}{3}$ d'cle qonē & mlt' 4 q̄s sit' 7 p sua ūgl'a. b ē p 2 & add' 1 er' 3 q̄ mlt' p 8 & p 4 q̄s sub sua ūgl'a eād' latūs. er' 2 8 8 q̄ sua. Et mlt' 2 q̄s sit' 8 p sua ūgl'a. s. p 4 & add' 1 er' 12 q̄ mlt' p 2 & p 7 q̄s sub p̄ma ūgl'a er' 18 2 q̄ add' ai 2 8 8 er' 4 7 0 q̄ poē sit' ipūs ūgl'as sibi' eod' m reliq̄s duab' ūgl'as mlt'as. & hēb' in corp' mlt'e 4 0 7 q̄ poē sit' ipūs ūgl'as & mlt' 4 7 0 p 4 0 7 0 & duūd' p ōs nuōs q̄s sub ūgul'. & hēb' q̄lit' mlt'orū. cū sit uis portas ip' eundē. s. duūdet 4 0 7 p 7 exibit 2 0 1 q̄ duūd' p 2 exibit 6 7 q̄ mlt' p 4 7 0 er' 2 4 0 q̄ duūd' p ōs nuōs q̄s sub ūgul' pō quā p 7 & p 2 iq̄b; duūdtis 4 0 7 Et aptab' p̄lōrūs rupt'as sub una ūgl'a exibē $\frac{1}{6}\frac{0}{8}\frac{0}{8}\frac{1}{3}\frac{2}{11}$ phē ē modū potōs mitt're si sub ūgul' ponerent' trēs rupt'as ut' plures.

De trib; ungulis

Si uolūt' mitt'ere $\frac{1}{2}$ & $\frac{1}{4}$ & $\frac{1}{4}$ p $\frac{2}{4}$ & $\frac{1}{6}$ & $\frac{1}{3}$ d'cle qōm & ita p mitt're sing'los ūgl'as. s. $\frac{1}{4}\frac{1}{4}\frac{1}{2}$ in se ipsos sic. mlt' 1 q̄ē sit' 2 p 4 q̄s sub sua ūgl'a. q̄ p 4 q̄s sub ētua er' 2 & mlt' 1 q̄ē sit' 4 d' sua ūgl'a p 4 q̄s sub ētua. & p 2 q̄s sub p̄ma er' 1 4 Et mlt' 1 q̄ē sit' 4 ētue ūgl'e p 4 q̄s sub sua. & p 2 q̄s sub p̄ma er' 12 q̄ add' ai 4 4 & 2 & 2 quar' er' 4 7 q̄ poē sit' $\frac{1}{4}\frac{1}{4}\frac{1}{2}$ in q̄e p̄b tuores sibi' d' $\frac{1}{7}\frac{1}{6}\frac{2}{4}$ Et hēb' icoꝝ sūma 4 0 q̄ poē sit' $\frac{1}{7}\frac{1}{6}\frac{2}{4}$ & mlt' 4 7 p 4 0 er' 7 0 0 2 q̄ duūdes p ōs rupt'as & aptā eoꝝ exibit. $\frac{1}{2}\frac{1}{7}\frac{2}{3}\frac{2}{10}\frac{2}{10}$ D' eodē cū duob' rupt'is sub una ūgl'a

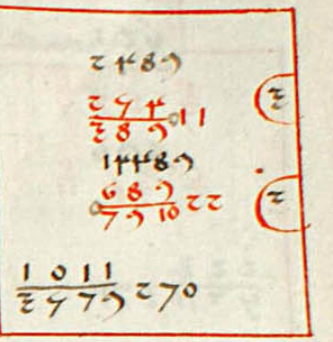
Si uolūt' ponē duas rupt'as sub una q̄q ūgl'a. ut $\frac{1}{2}\frac{6}{11}$ & $\frac{2}{2}\frac{2}{10}$ & $\frac{2}{4}\frac{2}{3}$ cū $\frac{1}{2}\frac{7}{12}$ & $\frac{1}{2}\frac{2}{7}$ & $\frac{4}{4}\frac{1}{8}$ d'cle qōm. & mlt' p'mal' sit'es tres ūgl'as i se ipās. b ē 6 q̄s sit' 11 p 2 & add' 1 er' 12 q̄ mlt' p 10 & p 2 q̄s sit' sub sua. q̄ ita p 2 & p 2 q̄s sub ētua er' 1 2 0 4 0 q̄ sua & mlt'a 2 q̄ s sit' 10 d' sua ūgl'a p 2 & q̄s sub ūgl'a p̄ma. & add' 2 q̄s sit' ipā 2 er' 11 q̄ mlt' p 3 & p 2 q̄s sub ētua ūgl'a & p 2 & p 11 q̄s sub p̄ma er' 8 7 12 q̄ sua & mlt' 2 q̄s sit' 3 d' ētua ūgl'a p 2 & add' 2 er' 11 q̄ mlt' p 2 & p 10 q̄s sub sua ūgl'a. & p 2 & p 11 q̄s sub p̄ma er' 7 2 0 0 q̄ add' ai 8 7 12 & ai 1 2 0 4 0 quar' er' 2 0 0 12 q̄ poē d' sit' iq̄e. dūi mlt' mitt'eres tres ūgl'as i se ipās & sit' eoꝝ sūma 2 3 9 1 2 q̄ poē sit' ipūs ūgl'as. & mlt' 2 0 0 12 p 2 3 9 1 2 & duūd' sūmā mitt'as p ōs rupt'as q̄ s sub ūgl'is. & hēb' q̄lit' mitt'andōm. Vl'

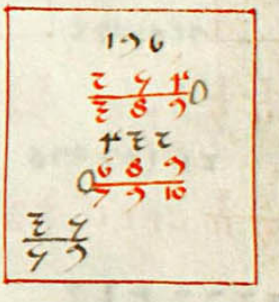
si uoluĩs ni euitare. facies fm dĩs supi dmõstrationẽ. ⁊ hẽb pãsita mlẽ
suio uel supa subuna qq; ugla ponẽnt. ℞ si plẽs ugle sili ponẽnt cũ mtegl ut sup
mtegl ꝑ plcpũ magnitudĩ omia potũt subtahi opan. Incip pars septima d multiplicatione

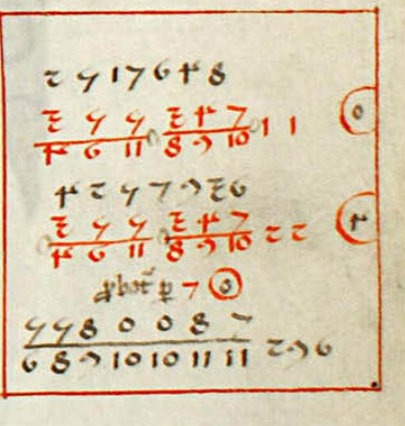
Sunt 11 ⁊ qttuor nonal ⁊ qnq; ectaual qttuor numeror; et ruptor; qu ugie ĩmiãnt ĩ eculo
nonani. ⁊ dual ectal qnq; ectauaui d qttuor nomt q sic scbũt 1 1 mltare
ꝑ 7 sex septimal octo nonar; et nouie decimt q sic scbũt vlcbe qm ⁊
mt 11 pluã ugla. q mlo sic mltãt 11 ꝑ ⁊ adhũt 7 ⁊ 10 none q mltãt ꝑ 8 sũt 8 7
septuagesime sc qb; addt mlo d ⁊ m 7 q ꝯ sit ugã et 8 7 septuagesime sc. q cũ mltãt
7 q ꝯ sit ꝑ 8 quent mũt cui ꝑparo ẽ ad nũm uemẽtẽ excedat 9 in 8 sic ꝑparo d
7 ad 9 ergo 7 et d 7 Jc ꝑparo nũi uemẽtẽ excedat ⁊ ĩ 7. s. 7 o admũm uemẽtẽ
excedat 8 in 7. s. ad 7 ẽ sic ꝑparo d ⁊ ad 8 ergo q ꝑmt ex ⁊ ĩ 7 et ⁊ q; ectaue ex
qttuor nonal d 7 ⁊ sic ꝯ septuagesime sc. dmi mltãt 8 7 ꝑ 7 sit addt 7 o q quem
mũt ex mltẽ d 7 ĩ ⁊ quã ĩ 7 q ꝯ sit ugã ẽt 7 ⁊ 7 ducetesime sexte. x. sua cal sit 11
cũ eccũ plu q accipit ordine eod. s. mltant plu 11 ꝑ plu d 9 ⁊ addat 7 q; plu mltãt ꝑ 8
⁊ adhũt mlo d ⁊ m 7 cui lũme plu mltãt ꝑ 7 ⁊ addt mlo d 7 ĩ ⁊ ducta ĩ 7 cui lũme plu ẽ
plus 7 ⁊ 7 7 ⁊ ẽ 9 ꝑ plũ d 11 dmi mltã 7 7 ꝑ sua ũgã q sit sit mltant 7 7 ꝑ 10 q sũma
mltant ꝑ 9 q ꝑ 7 et abit 1 7 8 6 0 sexcẽtesime tgesime q; adele mltcẽm d 6 ĩ 8 q ĩ 9 q sũt
sit ugã. s. 7 7 7 et 1 7 7 9 7 sexcẽtesime tgesime sua cal sit 7 7 cui eccũ plu q ẽ 7 ⁊ mltã
7 ⁊ 7 7 ꝑ 1 7 7 9 7 ⁊ duplet sũma ꝑ ꝯ tuptor; qu ꝯ sub ãlub; ugis tri cuitab q
euitare poter. ⁊ hẽb sũmã ꝑ sepre mltãtig. 1 0 1 1 7 7 9 7 0

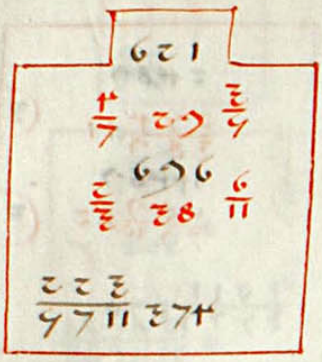
Et si 7 9 8 5 0 iqũq; uni nũi reducẽ uel b duplicat facẽ dmõstrabo. mltp̃mũ 9 ꝑ 8 q
ꝑ 7 et 7 16 d q; fac colũnã ⁊ acc exeal 7 5 et 9 6 d q; acc 9 8 et 6 0 d q; accape 7 7 et 7 0 add
inq; 9 6 7 6 0 ⁊ 7 0 et 1 9 6 q duplet ꝑ 7 16 exibit 7 5 4 4 hẽ 18 6 9 ut alit mltau 7 q ꝯ sit 9 ꝑ 8 ⁊
add mltcẽm d ⁊ m 7 et 4 7 q mltca ꝑ 7 ⁊ add mltonẽ d 7 ĩ ⁊ quã ĩ 7 s. 7 0 et sili 1 9 6 per
qttũ d 8 q ꝯ sub ũga. ⁊ ꝑ 7 ꝑ 9 exibit sili 18 6 9 Jcẽ si 6 8 9 10 mpãtes unĩ integr
nũi reducẽ uel mltau 6 ꝑ 8 q ꝑ 9. s. ea q sit ugã et 7 7 q duplet ꝑ nuos q ꝯ sub ũga
7 euitab q euitau poter exibit 7 5 4 hẽ 7 4 7 7 Et si 7 9 8 5 0 ꝑ 6 8 9 10 mltiplicatus in ꝑmũ
in margie emẽt 7 mltau ĩtcta 1 9 6. s. nũm sũcat ugẽ ꝑ 7 7. s. ꝑ nũm ĩtcta. ⁊ de
inde sũmã ꝑ ꝯ nuos q ꝯ sub utraq; 7 euita exibunt. 7 9

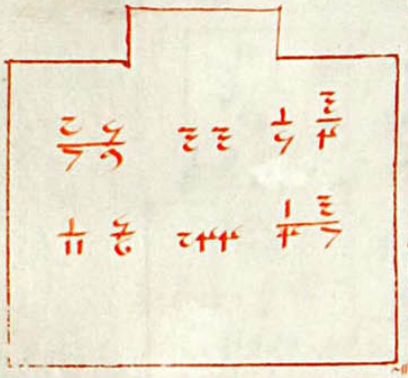
Sunt mltie 11 ⁊ septẽ decimal ⁊ qttuor nonal septẽ decias. ⁊ tres octaual qttuor nonar
septẽ decianũ. ⁊ qnq; ũdecial. ⁊ qnq; sextal qnq; xcti. ⁊ tres qttal qnq; sextar qnq; xcti.
ꝑ 7 ⁊ tres octaual qttuor nonar septẽ decias. ⁊ tres qttal qnq; sextar qnq; ũdecimar
vlcbe b ut sup in magie 7 mltau 11 ꝑ 10 ⁊ add 7 q ꝑ 9 ⁊ add quat septẽ q ꝑ 8 ⁊ add ẽ
7 inalt; 7 et 8 7 7 7 q ꝑ 11 q ꝑ 6 q ꝑ 7 q ꝯ sub alia ugla et 7 7 9 ⁊ 7 8 Et mltca
⁊ q ꝯ sit 11 ꝑ 6 ⁊ add q nq cl ⁊ q ꝑ 7 ⁊ add ẽ ⁊ q nq ꝯ. s. mlom nuor q ꝯ sit ugã et 7 9 ⁊
q mltca p nuos q ꝯ sub p ma ũga. s. ꝑ 8 q ꝑ 9 q ꝑ 10 et 7 11 7 00 q add cũ alio ĩtcto nuo
et 7 9 1 7 6 7 8 q pẽ sit 11 quor; plus ꝑ 7 ẽ 9 ⁊ mltau 7 7 p sual ugal. s. ꝑ 10 q ꝑ 9 q ꝑ 8
⁊ add mlom d 7 ĩ 7 ducta ĩ 7. s. 8 7 et 1 9 7 7 q mltau 11 q ꝑ 6 q ꝑ 7 et 7 7 0 7 9 7 6 cui
q; add mlo nũi sc uge ĩtuos q ꝯ sub p ma ũga. s. d 7 9 8 q 9 q 10 Na 7 9 p aut exitus

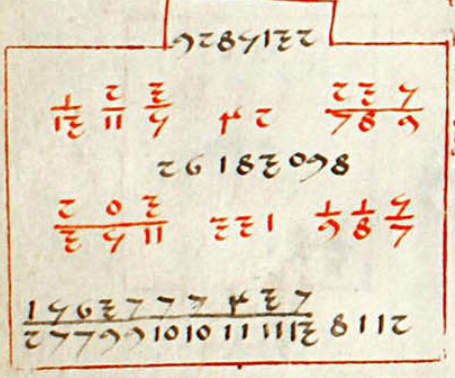












que adde cum 4 2 0 3 9 3 6
erunt 4 2 5 7 9 3 6

ductis in 5 quibus in 5 que sunt ungulae erunt 5 4 0 0 0 que sua sunt 22 quorum proba est 4 deinde multiplica numerum positum sunt 11 per numerum positum sunt 22 et diuides summam per omnes numeros qui sunt sub ungulis et euitanda euita et habebis quesita ut in questione ostenditur. Incipit pars septima sexti capituli de multiplicatione partium numerorum cum ruptis

Si uoluerimus multiplicare $\frac{3}{5}$ de $\frac{4}{7}$ 29 que sic scribuntur $\frac{4}{7}$ 29 $\frac{3}{5}$ cum $\frac{6}{11}$ de $\frac{2}{3}$ 38 que sic scribuntur $\frac{2}{3}$ 38 $\frac{6}{11}$ describe questionem ut hic ostenditur. Et multiplica 29 per suam ungulam que est eius retro. s. per 7 et adde 4 erunt 207 que multiplica per 3 que sunt sub aliam ungulam que est ante ipsam. s. sunt 5 erunt 621 que ponuntur sunt $\frac{4}{7}$ 29 $\frac{3}{5}$ Similiter multiplica 38 per suam ungulam que est eius retro. s. per 3 et adde 2 erunt 116 que multiplica per 6 que sunt sub 11 erunt 696 que ponuntur sunt $\frac{2}{3}$ 38 $\frac{6}{11}$ Et multiplica 621 per tertiam de 696 et diuides per omnes reliquos ruptos utrique lateris. s. per $\frac{1}{5}$ $\frac{0}{7}$ $\frac{0}{11}$ et habebis per summa quesite multiplicationis. $\frac{2}{5}$ $\frac{2}{7}$ $\frac{2}{11}$ 374 de eodem

Item si $\frac{1}{5}$ $\frac{3}{4}$ de $\frac{2}{7}$ $\frac{5}{9}$ 33 que sic scribuntur $\frac{2}{7}$ $\frac{5}{9}$ 33 $\frac{1}{5}$ $\frac{3}{4}$ uoluerimus multiplicare per $\frac{1}{4}$ $\frac{3}{7}$ de $\frac{1}{11}$ $\frac{5}{6}$ 244 que sic scribuntur $\frac{1}{11}$ $\frac{5}{6}$ 244 $\frac{1}{4}$ $\frac{3}{7}$ describe ea ut in hac margine cernitur. Et multiplica 33 per suam ungulam que eius retro. s. per 9 et adde 5 que per 7 et adde 2 erunt 2116 deinde multiplica 3 que sunt sub 4 per 5 et 1 que est sub 5 per 4 erunt 19 que est numerus ipsarum duarum ungularum que sunt ante ipsam 33 que per 19 multiplica 2116 erunt 40204 que sunt ponuntur $\frac{2}{7}$ $\frac{5}{9}$ 33 $\frac{1}{5}$ $\frac{3}{4}$ quorum pensa per 13 ordine quo multiplicamus accepta est 8 que 8 ponuntur sunt 40204 in questione. Item multiplica 244 per suas ungulas que sunt retro eius. s. per 6 et adde 5 que per 11 et adde multiplicationem de 1 que est sub 11 in 6 erunt 16165 que multiplica per numerum ungule que est ante ipsam 244 s. per 13 que surgunt ex multiplicatione de 3 que sunt sub 7 in 4 ipso 1 sunt addito que est sub 4 erunt 210145 que ponuntur sunt 244 et suas ungulas. Et sunt ipsa ponuntur 0 que est pensa ipsorum per 13 et multiplica 40204 per 210145 et diuide summam multiplicationis per omnes ruptos qui sunt sub omnibus ungulis. Et sic habebis quesitam multiplicationem. Sed ut modus euitandi in hac retineatur multiplicatione diuides 40204 per 4 que sunt sub una prescriptarum ungularum exibunt 10051 que sua cum non possit exeis amplius euitari. Item diuide 210145 per 5 que sunt sub alia ungula. exibunt 42029 per que multiplica 10051 et diuides per omnes alios ruptos exibunt $\frac{2}{3}$ $\frac{6}{7}$ $\frac{0}{7}$ $\frac{1}{8}$ $\frac{4}{9}$ $\frac{4}{11}$ 3628

De eodem cum pluribus ruptis.

Item si uoluerimus multiplicare $\frac{2}{7}$ $\frac{3}{8}$ $\frac{5}{9}$ de $\frac{1}{13}$ $\frac{2}{11}$ $\frac{3}{5}$ 42 per $\frac{1}{9}$ $\frac{1}{8}$ $\frac{5}{7}$ de $\frac{2}{3}$ $\frac{0}{5}$ $\frac{3}{11}$ 33 describe questionem. et incipias multiplicare 42 per suas ungulas que sunt eius retro erunt 30644 et accipe $\frac{2}{7}$ $\frac{3}{8}$ $\frac{5}{9}$ et inuenias numerum ipsorum ruptorum. s. multiplica 5 que sunt sub 9 per 8 et adde 3 que per 7 et adde 2 erunt 303 per que multiplica 30644 erunt 9285132 deinde ut inuenias numerum inferioris lateris multiplica 331 per suam ungulam que est eius retro uidelicet per 11 et adde 3 que sunt sub ipsa 11 que multiplica per 5 et per 3 que sunt sub eadem ungula. et de sunt adde 2 que sunt sub ipsa 3 erunt 54662 et reperias numerum de $\frac{1}{9}$ $\frac{1}{8}$ $\frac{5}{7}$ que est 479 per que multiplica 54662 erunt 2618309 8 que ponuntur sunt 331 et suis ungulis. et multiplica 9285132 per 2618309 8 et diuide per omnes ruptos qui sunt sub omnibus ungulis. et euita nam ea que euitari poterit et habebis per quesita multiplicatione ut hic ostenditur. $\frac{1}{2}$ $\frac{5}{7}$ $\frac{6}{7}$ $\frac{3}{9}$ $\frac{7}{10}$ $\frac{7}{10}$ $\frac{7}{11}$ $\frac{4}{11}$ $\frac{3}{13}$ 8112

Incipit capitulum septimum de additione et extractione et diuisione numerorum cum ruptis et de reductione pluriumque partium in singulis partibus

Septimum itaque capitulum in partes sex diuidimus. In prima quarum additionem unius ungule cum alia. nec non extractionem unius ungule de alia demonstrabimus. et diuisionem unius ungule per aliam

In secunda additionem et extractionem duarum ungularum cum duabus. et de diuisione earum ad inuicem

Nona diuisionem integrorum numerorum per integros et ruptos et eorum contrarium

Nona quarta additionem et extractionem et diuisionem integrorum numerorum cum ruptis cum integris et ruptis

Nona quinta cum additionibus extractionibus seu diuisionibus partium numerorum cum ruptis edocebimus.

Nulla quoque reductiones plurium partium in singulis partibus ostendimus. De additione $\frac{1}{3}$

Si uoluerimus addere $\frac{1}{3}$ cum $\frac{1}{4}$ hic te duplicare facere docemus. primum quidem secundum uulgi cum $\frac{1}{4}$ modum. Inuenias in quo numero reperiatur $\frac{1}{3}$ et $\frac{1}{4}$ que numerus sic inuenitur. multiplica 3 per 4 que sunt sub ungulis erunt 12 in

621
$\frac{4}{7}$ 29 $\frac{3}{5}$
696
$\frac{2}{3}$ 38 $\frac{6}{11}$
$\frac{2}{5}$ $\frac{2}{7}$ $\frac{3}{11}$ 374

$\frac{2}{7}$ $\frac{5}{9}$ 33 $\frac{1}{5}$ $\frac{3}{4}$
$\frac{1}{11}$ $\frac{5}{6}$ 244 $\frac{1}{4}$ $\frac{3}{7}$

9285132
$\frac{1}{13}$ $\frac{2}{11}$ $\frac{3}{5}$ 42 $\frac{2}{7}$ $\frac{3}{8}$ $\frac{5}{9}$
2618309 8
$\frac{2}{3}$ $\frac{0}{5}$ $\frac{3}{11}$ 331 $\frac{1}{9}$ $\frac{1}{8}$ $\frac{5}{7}$
$\frac{1}{2}$ $\frac{5}{7}$ $\frac{6}{7}$ $\frac{3}{9}$ $\frac{7}{10}$ $\frac{7}{10}$ $\frac{7}{11}$ $\frac{4}{11}$ $\frac{3}{13}$ 8112

27

Ibi remanet ½ ¼ 7 10 ad' cui tota pars eorum qui ½ 7 quarta pars eius 7 ad' cui similit' et 7 quidam pars eorum abbatissa 7/12 Hec sequitur pars cuiusdam campi unius integri.

De extractione

Item alia species ¼ ½ milies modum 7 milies 1 qui est ½ 7 ¼ et qui est ½ 1 qui est ¼ milies ½ et qui ½ 7 ¼ 7 adde cui similis et 7 quidam pars ½ 7 ¼ quia subduplum. Hec pars abbatissa 7/12 pecunia vicecomitis 7 sacal quando recedit addit ½ cui ¼ quia est duplum ¼ ½ quia patet sua una integra pars 7/12 unius integri. 7 sic medietas de omnibus aliis proximis addimodis.

De extractione ¼ de ½

Et si uolueris ¼ de ½ extrahere. tu quia sit ¼ hec quam dicit esse de ¼ quia sit ½ hec tua dicit remanebit 1 quidam pars tua. ut 7 ¼ quia subduplum abbatissa proximo dimidio extracto ½ hec ½ 0/6 Et si ½ ¼ duodecim ut duo ¼ quia sit ½ 7 ½ 1 proximo quia subduplum 7 ½ Vin qui proximo ½ ac ¼ et si proximo duodecimplo ½ addunt ¼ hec sic ¼ et 7 ½ et ¼ Et si duodecim ½ ¼ quemadmodum quod dicitur duodecim ½ ¼ et iungit quia proximo quod iungit tua integra. Et quadruplo quia proximo. s. quam integra quia quadruplum mensis ½ 1 ut patet. Et si ¼ ½ duodecim ut sacal quod non iungat unum quia duodecim integre 7 pomum sit ¼ pomi sit ½ extrahe 7/4 Quia proximo ¼ ad ½ et sic proximo 7 ad ¼ ut cui extrahitur ¼ hoc tantum. s. quam integre quia 7/4

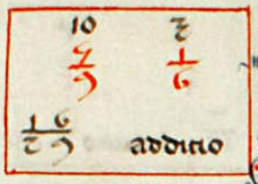
Item si uolueris addere 7/4 cui 5/4 iuxta sibi in quo nullo repiantur 5/4 7/2 sic nulle 7 4 quia subduplum et 1 4 et ipso nullo repiuntur 5/4 7/2 quia accipe 7/2 de 14 4/4 de 14 quia 10 5/4 de 14 quia 12 quod remanet et 7 quidam pars 4 extrahitur 7/14 1 quod nullum addere 7/4 7 5/4

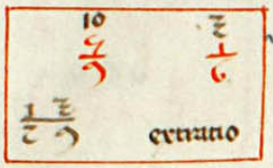
Item alia species 5/4 7/2 ut unum mangonum octaduc. 7 milies quia sit 7 4 et 10 quia subduplum 5/2 et 4 quia sit 4 7 et 12 quia proximo nullo repiuntur 5/4 7/2 et 10 quia 5/4 de 10 quia 12 quod remanet 7 quidam pars ruptum quia subduplum. s. 1/2 0/4 extrahitur 7/2 0/4 et 7/14 et sic duo quia medietas. 7 octo 10 de 12 remanet 7 quidam pars ruptum unde 1/2 0/4 extrahitur 7/2 0/4 et 7/14 et sic duo quia medietas ruptum et 7 quidam pars ruptum extrahitur. Et si 5/4 7/2 duodecim ut duo 10 12 extrahitur 4/4 1 et sic ordo unum

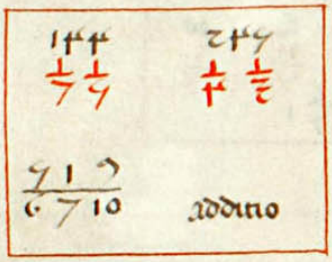
Item magnum ex parte diuisoris. Et si 7/2 5/4 duodecim ut duo 10 12 extrahitur 7/6 addimodo 7/6 cui 7/10

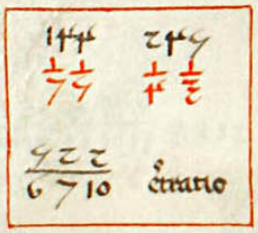
Item si uolueris addere 7/6 cui 7/10 repiuntur si in quo nullo repiantur 7/6 7/10 nulle quia 6 10 60 et pariter 6 7 in minori nullo quia 60 Et hoc agitur quia minor quia habet 6 cui 10 et 7 de 1/2 et utraque nulla integra pars 7 duodecim. Vnde duodecim 60 7 extrahitur 20 quia repiuntur 7/6 7/10 patet hec 20 alia repiuntur unde ut milies 6 7 medietatem de 10 s. 7 4 7 et 20 quia 10 proximo 7 et cui similis 20 et quia 7/6 de 7 hec 7 et 7 et similis 20 et quia 16/20 1 hec 8/14 1

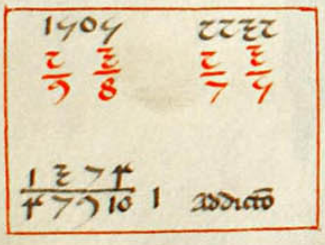
Item alia species sic 7/10 7/6 7 quia 6 cui 10 quia sub uno duodecim 10 7 extrahitur 6/2 0/2 et 7/4 7 6 quidam pars 7 20 extrahitur 16/20 1 hec 8/14 1 Et quia de 7/10 de 7/6 et 7/10 de 7/6 et 7/10 de 7/6 et











iuctē q; ꝫ sī cōsi rī d 6 ⁊ d' duuꝫ 6 p ꝫ exbīt ⁊ q̄ mł' p' ei 18 ut' duuꝫ p ꝫ exbīt ⁊ q̄ mł' p 6 ei silr 18 iq̄b; repiūt 5/3 + ūñ acē 1/6 d 18 q̄ē ⁊ ⁊ adele aī 5/3 d 18 q̄ꝫ 10 ei 17 q̄ duuꝫ p regłaz d 18 exbīt 1/2 5/3 ut' alr' dsde ruptꝫ ut' b' ostēdit'. ⁊ mł'a 1 q̄ē sī 6 pt̄iā d' ꝫp cēm regłaz ꝓxīū. ei ⁊ q̄ pē sī 1/6 ⁊ mł'a ⁊ q̄ꝫ sī' pt̄iā d 6. s. pz ei 10 ⁊ q̄ pē sī 5/3 ⁊ ad' ⁊ aī 10 ei 17 q̄ duuꝫ pt̄iā mł'as d 6 10 bē p 18 exbīt 1/2 5/3 ꝓuictāe ꝓxīꝫ ut in q̄one ostēdit'. Exēmo 6 d' 7/3.

Cnū 1 d 5/3 ēxbē uolūīt repiel pl'cptā ⁊ ⁊ 10 ⁊ ēxbe ⁊ d 10 remanebīt 7 q̄ pl'cpta rē duuꝫ p 18 ut' p ꝓxīꝫ regłaz q̄ē 1/2 5/3 exbīt 1/2 7/3 p reliquo dicte exēmōis. Er si 5/3 p 1/6 duuꝫ uł duuꝫ 10 p ꝫ q̄ꝫ sī 1/2 exbīt 1/2 7 Er si 1/2 p 5/3 duuꝫ uł duuꝫ ⁊ p 10 exbunt 7/10 Pars sēda de additione et ēmōis duꝝ ruptōr adunatōe ed' uł duuꝫ

Suoluūt addē 1/4 1/2 aī 1/3 1/7 uł d 1/3 1/7 + 1/2 1/7 q̄ nūo repiūt q̄ sic undē dū ē. mł'. unsimł nuōꝫ q̄ꝫ sub ūgut' udel' ⁊ p 4 q̄ p 4 q̄ p 7 er 4 10 q̄ē minimꝰ 9 nūsimat' pl'cptōrū nuōꝫ. bē q̄ē minor nūs in q̄ repiūt' pl'cpta rupta. cō q; ñ bīnt aliq̄a cēe ad inuicē. Hoc g 1/2 de 4 10 q̄ē 14 10 ⁊ add' aī q̄rta de eisd 4 10 q̄ē 10 4 ⁊ aī q̄rta q̄ē 8 4 ⁊ aī septa q̄ē 60 er ⁊ 80 quē duuꝫ p 4 10 exbīt 7 8 0/4 10 ꝓuicāe pl'cptōꝝ ruptōrū. Er ē idē aī q̄ut' d 1/3 1/7 1/4 1/2 q̄ pticł sit unꝰ integ. Possum' ē alr' fm magnitūd nūꝝ adde 1/4 1/2 aī 1/3 1/7 udel' q' dsclusē ruptā fm q' b' enūt' ⁊ mł'a 1 q̄ē sī ⁊ p 4 7 1 q̄ē sī 4 p ⁊ er ⁊ q̄ mł'. p 4 ⁊ p 7 q̄ꝫ sub aliꝰ duab; ūgut' alīꝰ latūl. er 7 4 q̄ꝫ 1/4 1/2 d 4 10 ut supi ūcim'. pē g 7 4 sī 1/4 1/2 iq̄ē d ñ accedūt ad 1/3 1/7 ⁊ mł'a 1 q̄ē sī 4 p 7 7 1 q̄ē sī 7 p 4 er 12 q̄ mł' p ⁊ 7 p 4 q̄ꝫ sub ūgut'. er 14 4 q̄ꝫ 1/4 1/2 d 4 10 pē g 14 4 sī 1/3 1/7 ⁊ add 14 4 aī 7 4 4 er ⁊ 80 q̄ duuꝫ p ruptꝫ udel' p 1/2 4 0/4 0/7 ⁊ aptā pl'cptꝫ ruptꝫ exbīt 7/6 1/7 2/10 q̄ eq̄nt' 7 8 2/4 7 10 Exēmo de 1/3 1/7 de 1/4 1/2

Suo 1/3 1/7 d 1/4 1/2 ēxbē uolūīt repiel pl'cpta 7 4 ⁊ 14 4 p eq̄lē uolūīt modū d' duob; pl'cpuł modł ⁊ ēxbe 14 4 d 7 4 remanebīt 10 1 q̄ supꝰ pl'cpta rē duuꝫ p 1/6 7/0 0/10 exbīt 7/6 7/7 2/10 p reliquo dicte exēmōis. Er si 1/2 1/3 p 7/3 duuꝫ uł duuꝫ 7 4 p d 14 4 exbīt 1/2 6/8 7 1 Er si 14 4 p d 7 4 duuꝫ uł bē 7/6 0/7 0/7 p eo d' q̄ integ' integ' ꝓ ex duuꝫ 1/3 1/7 un 1/4 1/2 ut inq̄ē ostēdit'. Addimo d 2/3 7/6 7/4 aī 2/3 7/8

Tcem si uolūīt addē 2/3 7/6 aī 2/3 7/8 repiel nūm inq̄ repiant ruptā eātq; 7 7 8 q̄ exīt ex mł'ē q̄tuoz nūoꝝ q̄ꝫ sub ūgut' q̄ñ repūt' in minore nūo eo d' ñ bīnt aliq̄a cēem i ad inuicē. q̄ac 2/3 d 7 4 7 0 q̄ꝫ 14 7 4 add aī 2/3 d 7 4 7 0 q̄ꝫ 7 7 0 er 7 7 7 7 q̄ rua. Jtē ac 2/3 7/8 d 7 4 7 0 q̄ꝫ 14 9 4 q̄ add aī 7 7 7 7 ruaꝫ er 7 7 7 7 q̄ duuꝫ p 4 d 7 4 7 0 q̄ē 1/4 0/7 0/3 0/10 exbīt 1/4 2/7 7/3 4/10 1 Jtē alr' dsde ruptꝫ ut inferi ānt. ⁊ iapsa 2/3 7/4 sic mł'b ⁊ q̄ꝫ sī 4 p 7 q̄ꝫ sub ūgła er 7 1 Jtē mł'b ⁊ q̄ꝫ sī 7 p 4 er 10 q̄ adde aī 7 1 er 7 1 q̄ mł'b paliꝫ ruptꝫ udel' p 8 9 p 3 bē p 7 7 exbīt 7 7 7 7 ut p 2/3 7/4 d 7 4 7 0 supi repm ꝫ pē g 7 7 7 7 sī 2/3 7/4 ⁊ accedūt ad 2/3 7/8 ⁊ mł' ⁊ q̄ꝫ sī 8 p 7 ⁊ q̄ꝫ sī 3 p 8 ⁊ add unsimł er 1 7 ⁊ q̄ mł' paliꝫ ruptꝫ udel' p 4 9 p 7 er 14 9 4 ut supi p 2/3 7/8 d 7 4 7 0 muenim pē g 14 9 4 sī 2/3 7/8 d ñ add 14 9 4 aī 7 7 7 7 er 7 7 7 7 q̄ duuꝫ p ꝫ ruptꝫ nuōꝫ q̄ꝫ sub ūgut'. ⁊ aptab ag exbit silr. 1 7/4 7/3 10 1

Si aũ ½ ⅛ d ½ ¼ ẽtẽ uoluĩt repiet pl̃pta ꝛ ꝛ ꝛ ꝛ q 1404 q ecta Exacto ½ ⅛ d ½ ¼ hẽ 1404 d ꝛ ꝛ ꝛ ꝛ remanebit 727 q̃ pl̃pta nõe duna p ¼ 0 0 0 ½ 0 ecabit ½ 6 7 2 ¼ 7 ½ 10 ur hue alia ãnõe dl̃ptõe. Et si ½ ¼ p ½ ⅛ duade uel duna ꝛ ꝛ ꝛ ꝛ pd 1404 q una gemina finaet gñatiõ. q uelẽ optata ut in qõe ãnõ. Addiao ¼ ½ cum ⅙ ¼

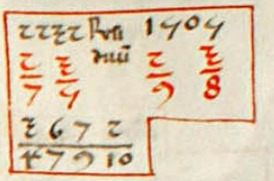
Tem si uoluĩt addẽ ¼ ½ aũ ⅙ ¼ iueiet nũꝫ in q̃ repiãt pl̃pta rupta. Et quia 60 q nũl repiõ cemlãe d ¼ i ¼ i ¼ ñ oportet ut mlẽt 60 p 6 pp coĩnatõ regle quã hñt 6 aũ ꝛ q aũ ¼ una ẽ ꝛ ſt coĩa eiſd 6 q̃ ñ oppõtet ut mlẽt 60 n̄ p tria d 6 q̃ ẽ ꝛ ñ q̃ pñs ꝛ oportet 60 mlte. q ꝛ q̃ ī ī d ¼ q ut b ducã p mptũ ẽ d 6 ẽ ½ 0 ꝛ jõ ñ repeam ī ꝛ neq ꝛ ī mlãe. q̃ q̃ d 6 p ꝛ ꝛ q̃ mlãnum ꝛ aũ bñm 60 Jnoi ẽ nũo ī q̃ repiãt ¼ ½ repiet q ½ aaipe maq ½ ¼ ¼ ½ d 60 q add̃ insimt̃ et 47 q̃ duna p 60 ecabit 20 0 azq 47 aũ 60 hñt cõz ꝛ ſ. ½ possum hoc 20 0 pulchũ dicẽ uidet ut duadas 47 p ꝛ ecabit 10 simt̃ duna 60 p ꝛ ꝛ ecabit 10 iq; duna 10 ecabit 120 q̃ unũ ītegũ mnũ ugesima. Jẽ alr d ſcbe nup; ut ſ oſtẽdat. q ī apiasa ¼ ½ q mlt 1 d ẽ ſi ꝛ ¼ q 1 d ẽ ſi ¼ p ꝛ et 7 q mlt p q q̃ ſub ũgla. et ꝛ 4 q debet mlte p 6 ñ reliq̃tur pp coĩnatõ qũ hñ 6 aũ ¼ ½ ponẽ g ꝛ 4 ſi ¼ ½ q̃ ¼ ½ d 60 d nũ mlt 1 d ẽ ſi 4 p 6 q 1 q ẽ ſi 6 p 4 et 11 q debẽ mlte p ꝛ q̃ p q̃ reliq̃t q̃ nũ mlt p ꝛ q ꝛ q̃ ī ī d 6 neq ꝛ q̃ ī ī d ¼ aũ ſit simlr ī ī d 6 g mlt pl̃pta 11 p ꝛ q remanẽt d ¼ et ꝛ ꝛ q̃ ½ ¼ d 60 pdẽ g ꝛ ꝛ ſi ½ ¼ q add̃ ꝛ ꝛ aũ 4 et 47 ut ſi inuẽnt q duna ipa p ½ 0 ¼ 0 q ꝛ p 6 ñ debet duadẽ eo q nos reliq̃m ea ĩmlãe utrũq; latũ q apt̃ pl̃pte rupte ecabit ½ 2 10 hẽ 120 ut in qõne oſtẽdit.

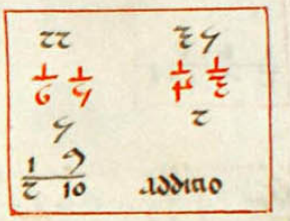
Quã alr q apt̃ un repiãtur ſtũ 4 ꝛ ꝛ ꝛ oſtat ꝛ p ¼ q̃ ſub ũgis abuna pte et 12 ſua ea ĩmanu dext̃ q mlta 4 p 6 q̃ ſub alus duab; ũgis altũus latus et 20 q ſua insimt̃ q duna utrũq; nuõrũ fuatoꝛ ĩmanib; p maxẽ eõem ĩ ſuñ coꝛ q̃ ẽ 6 ecabit in manu dext̃ ꝛ q insimt̃ 4 pẽ ꝛ ſub ½ ¼ q 4 ſub ⅙ ¼ q mlt repta 7 p 4 ponta ſub ½ ¼ q 11 p ꝛ ponta ſub ¼ ½ q hẽ 24 q ꝛ ꝛ ꝛ q̃ ſũma ſ 47 duna p nuõ q̃ ſub ũgis unus latus. q p mũm ponẽ ſub alt ſ. ſ p 4 q 6 q ꝛ aut p ꝛ q ¼ q 4 hẽ p regla; d. 60

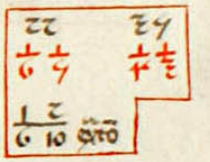
Si aũ ½ ⅛ d ½ ¼ ẽtẽ uoluĩt repiet pl̃pta 24 q ꝛ ꝛ ꝛ ẽtẽ ſ ꝛ ꝛ ꝛ d 24 re Exacto ½ ⅙ d ¼ ½ manebit 8 q duna ſtũ re p ¼ 0 10 ecabit ½ ⅙ 10 p reliduo dicat ecctõis.

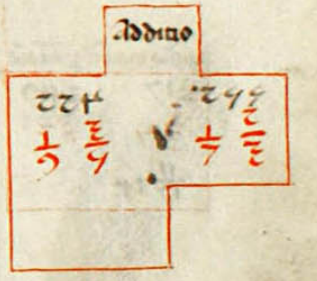
Tem si uoluĩt ode ½ ⅐ aũ ½ ⅕ repiat nũꝫ ī q̃ rpiant rupti pl̃pti addiao ½ ⅐ aũ ½ ⅕ ſitq; 24 q nũl ecat ẽmlãe rupto; eumt ẽ ñ ꝛ q̃ ꝛ coĩs ī d ꝛ q d ꝛ q̃ ñ oport repiẽ ī mlãe tõq ¼ q ⅕ rupũt ī ꝛ un oĩl nũl q hñt ½ hẽ filr q ½ ace g ⅐ d 24 q̃ ſ 10 q adde aĩ ½ coĩnd q̃ ẽ 4 et 24 q̃ ſua. q ace ½ ⅕ d ẽ ſ 24 q̃ ꝛ ꝛ q add aĩ 24 et 8 que duna p regla; d 24 q̃ ẽ 1 0 0 ⅕ ecabit 4 6 4 ⅕ 1

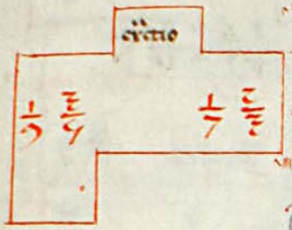
Hr ſm aũ d ſcbe rupto; ut ſ oſtẽdat. q ī apiasa ½ ⅐ mlt q̃ ſ ſi ꝛ p 7 q 1 q̃ ẽ ſi 7 p ꝛ q add̃ insimt̃ et 17 q̃ mlt p 4 et 8 4 q mlt p ꝛ ꝛ a d ꝛ hẽ p ꝛ pp coĩnatõ regle q̃ hñ ꝛ q̃ ſub ũgla aĩ ꝛ ei; mlo illa ꝛ 24 q̃ ſ ½ ⅐ d 24 ut ſupi mueniũ. Jdeo g ꝛ 24 ſi ½ ⅐ q accidat ad ½ ⅕ mlãdo ꝛ q̃ ſ ſi 4 p ꝛ q 1 q̃ ſ ſi ꝛ p 4 et ꝛ ꝛ q mlt p 7 et ꝛ ꝛ ꝛ ut ſupi ſ ½ ⅕ d 24 rpta g. q ꝛ ꝛ ꝛ ñ oportet mlte p ꝛ q̃ ſub ũgla. pp coĩnatõ pdictã q hñt aĩ ꝛ pdẽ g ꝛ ꝛ ꝛ ſi ½ ⅕ q add ꝛ ꝛ ꝛ aĩ 24 et 8 ꝛ q duna p ½ ⅐ 0 ⅕ q̃ ſ hñt ꝛ reliq̃t ꝛ q ñ una p pdã tõq ꝛ ĩmlãe utrũq; pti. reliq̃t q ñ mlãnis p ꝛ q̃ ſũma

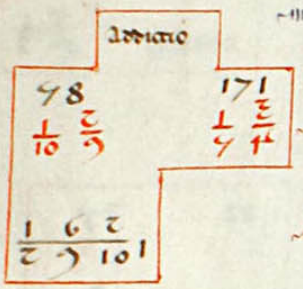


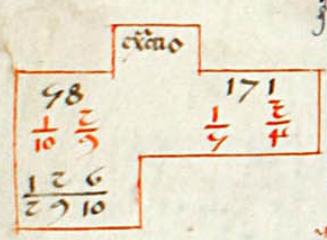


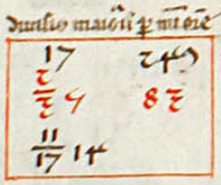












uicnōis ipoꝛ ꝓ̄tuū ti debet duudē ꝑ ꝛ ꝫ debeꝯ aī duudē ꝑ alioꝯ ruptoꝯ aī ꝑ ꝓ̄ꝯ mlt'aſſu
cabit $\frac{4}{7}\ \frac{6}{7}\ \frac{4}{7}$ 1 ut ſupl'. Exēmo $\frac{1}{7}\ \frac{2}{7}$ d' $\frac{1}{7}\ \frac{2}{7}$

Sui $\frac{1}{7}\ \frac{2}{7}$ d' $\frac{1}{7}\ \frac{2}{7}$ cōlē uoluīſ rcpiel' ꝑ ſ̄cꝑta 7 4 4 7 2 4 cēbet 7 2 4 d' 7 4 4 remānebūt
7 q̄ duud' ſtā rē̄ ꝑ $\frac{1\ 0\ 0}{4\ 7\ 7}$ mī p' duudaſ ꝑ 7 ꝑ 9 q̄ ꝑ 4 ꝯqz 1 integl' duudr ꝑ 7 ꝑ 2
q̄ ꝫ d' ꝛ ꝑoz̄ 9 cabit $\frac{2}{7}\ \frac{0}{4}$ ꝓſidno dē cc̄tōis. Hē $\frac{1}{2}\ \frac{0}{4}$ d' duuſicē aī eoꝝ ad mu
eam fac ut ſupra. Addimo d' $\frac{1}{4}\ \frac{3}{4}$ aī $\frac{1}{10}\ \frac{2}{7}$.

Rſuſ ſi uoluīſ addē $\frac{1}{4}\ \frac{3}{4}$ aī $\frac{1}{10}\ \frac{2}{7}$ mt' muīoꝯ q̄ ꝫ ſub ūgut'. ſ. ꝑ 4 cēt 9 q̄ ꝑ 9 cēt 180 q̄
180 nō poſſet mīrē ꝑ 10 aī 1 ſ 80 rcpiat' $\frac{1}{10}$ Cū accipiaꝯ $\frac{1}{4}\ \frac{3}{4}$ d' 180 ſ. 171 7 addaꝯ ea aī
$\frac{1}{10}\ \frac{2}{7}$ d' 180 ſ. aī 48 cēt 229 q̄ duud' ꝑ 180 cabit $\frac{1}{2}\ \frac{6}{7}\ \frac{2}{10}$ 1 Addimo d' $\frac{1}{4}\ \frac{3}{4}$ aī $\frac{1}{10}\ \frac{2}{7}$

Alīē dſcā ruptoſ 7 mt' 2 q̄ ꝫ ſt' ꝑ 4 7 1 q̄ ſt' 4 ꝑ cēt 19 q̄ mt' ꝑ 9 cēt 171 q̄ rcliquū mīt'
ꝑ 10 ꝑ cōitatē quā būt aī 4 7 aī ꝑ ꝓ̄ꝯ g̃ 171 ſt' $\frac{1}{4}\ \frac{3}{4}$ q2 uꝑ ſt' $\frac{1}{4}\ \frac{3}{4}$ d' 180 dīm mt' 2 q̄
ſt' 9 ꝑ 10 7 1 q̄ ē ſt' 10 ꝑ 9 cēt 29 q̄ mt' ꝑ 2 Et rcliquā ſ cōitatē q̄ būt 10 aī ꝑ 7 aī 4 cēt 48
q̄ ꝫ $\frac{1}{10}\ \frac{2}{7}$ d' 180 adē g̃ 48 aī 171 cēt 229 q̄ duud' ꝑ ruptoꝯ q̄ ꝫ i uno latē. 7 ꝑ ruptū alt'
latūl q̄ mīt'ur i mīcē. Hē aut ꝑ ꝑ 7 ꝑ 4 q̄ ꝫ i uno latē. 7 ꝑ 9 q̄ ꝫ i alio latē i q̄bz mīuoꝝ
ſupi 19 ut' duudeꝯ ꝑ 9 7 ꝑ 10 q̄ ꝫ eralto latē. 7 ꝑ 2 q̄ ſ ſupſtuū eralio latē i mīcē i q̄bz
unde' mīnuī 2 9 nā $\frac{1\ 0\ 0}{4\ 7\ 7}$ ut' $\frac{1\ 0\ 0}{2\ 0\ 10}$ unū ē 7 una q̄ q̄ ꝫ ꝯꝛ q̄ ſ ſupſtuū eralio latē i mīcē i q̄bz
Rm ſi $\frac{1}{10}\ \frac{2}{7}$ d' $\frac{1}{4}\ \frac{3}{4}$ cēt̄ uoluīſ. rcpiel' ꝑ ſ̄cꝑta 171 7 4 8 7 cēbet 48 d' 171 remanebit 117
q̄ duud' ſtā rē̄ ꝑ $\frac{1\ 0\ 0}{2\ 7}\ \frac{0}{10}$ cabit $\frac{1}{2}\ \frac{2}{7}\ \frac{6}{10}$ ꝓſidno dē cc̄tōis. Et ſi ea ad mīcē duudē
uel fac ut ſupꝛ. Volo dīoſtrare modū iueiendi mīmū mīſumū datoꝝ q̄rūlibz
nūeꝝ ut ſimul iueire nūm mq̄ rcpiat' $\frac{1}{10}\ \frac{2}{7}\ \frac{1}{8}\ \frac{2}{7}\ \frac{1}{6}\ \frac{2}{7}\ \frac{1}{4}\ \frac{3}{4}\ \frac{1}{2}\ \frac{2}{7}$ mīa maioꝛe nūꝝ
q̄ē ſub ūgn ꝓpoſitōe aī ñ ſit cōicātes. ſ. 10 ꝑ 9 cēt 90 Que mt' ꝑ cōitatē q̄ būt aī 8
ſ. ꝑmediatā eoꝝ aī bimaī ſut eoꝝ cōis mīſum equāt 2 60 q̄ mt' ꝑ 7 aī mīa ſit
aut mō ie ea cēt 270 q̄ñ oꝑtet mīrē ꝑ 6 aī ꝑoꝛ t' ſit $\frac{1}{2}\ \frac{0}{7}$ q̄ pātes ꝫ expāſibz nūoꝝ
mīatoꝝ. Hā $\frac{1}{2}$ ē d' 2 d' 10 q̄ t' ē $\frac{1}{2}\ \frac{0}{7}$ 7 $\frac{1}{2}$ ē d' 2 d' 9 neq̄ q̄ mīa dā ꝫ 270 ꝑ 4 aī 4
ſit d' 2 d' 10 nq̄ q̄ ꝑ 4 uꝛ 2 ſt' mt' ada aī ſit i 2 d' 8 7 ſit nq̄ ꝑ 2 oꝑtet mīaue 270
aī ſit d' 2 d' 9 g̃ m 270 rcpiuī ꝫ ſti rupti. q̄ē mumꝰ ꝯſtituīt oīū nūoꝝ q̄ ſit
ſub ꝓpoſit' ūgal. Incip ꝑ ſ̄ca de duuſiōe integꝝ nūoꝝ ꝑ integꝝ aī ruptaſ cā et

Si uoluīſ duudē aliq̄ē integꝝ nūy aī uno ruptō d' ꝯmūio
ut' plibz ut' eoꝝ integꝝ nūy aī ruptaſ paluū integꝝ nūm. fac ruptoꝯ
d' utꝛoq̄ nūo q̄leſ fuīt ille ut' illi q̄ fuīt poīa aī uno nūoꝝ. d' īn duud
ſūmā ruptoꝝ illi nū ꝑ ſūmā ruptoꝝ ill'. ā 7 q̄libz q̄ē uoluīꝫ duuſioꝫ
Et ut' mt' adculū d' pleōaſ q̄ūdō nūoꝝ duuſiōꝫ i ſeq̄ntibz dīoſtrē gaudebim.

Si uel duudē 8 ꝑ $\frac{2}{7}$ 4 fac ītiaſ d' uno q̄ nō ſic duuſio des 2 ꝑ $\frac{2}{7}$ 4
mt' 4 ꝑ 2 q̄ ꝫ ſub ūgā 7 adde 2 ſ ītie 17 7 mt' 8 2 ꝑ 2 ut fac aſ ītiaſ eoꝝ ꝓ̄ꝯ erūt
2 4 9 duuſ' g̃ 2 4 9 ꝑ 17 cabit $\frac{11}{17}$ 1 ſ. q̄ quelibz duuſioē.

Ecce g̃ manifeſtu q̄ ꝫ dē duuſio d' 8 2 i $\frac{2}{7}$ 4 quā d' 2 4 9 i 17 7 lr ēq̄ euclid' punſtim
geom̄ i ſua 6 d' ſ. q̄ quā ꝓportiōn hr quelibz nūy ad quelibz nūꝫ. eand
ꝓportiōm hr eq̄ libz mīa illoꝝ. q̄ mīa g̃ ꝫ 17 d' $\frac{2}{7}$ 4 tm mīt'plicā g̃ 2 4 9 d'
8 2 fiunt eq̄ 17 ꝑ la d' $\frac{2}{7}$ 4 7 2 4 9 ꝑ la d' 8 2

Si eyẽ uoluĩt dunde ... dunsio ... pi ... qẽ ... exibẽt ... qẽlibet dunsio

Si uoluĩt dunde ... sumatã plẽptã sm ... aut magistũ Dunsio ...

Tertiũ uoluĩt. dicere nũos. ut ... mt ... pluã ũgla. bẽ ... addr ... qnte ... qs

pẽ ... mt ... pcedr ... qs pẽ ... dunde ... p ... qẽ ... ga

bẽ ... pqlibet dunsio. Et ... p regla ... dunsio. ... pdunsio ...

ior ut supi mdicptõe ostẽdit. Vñ si ... p ... dunde uoluĩt. ut ... nũos

dicẽ. qbz dicpt. mt ... pluã ũgla ... qs pẽ ... dunde ... pluã ũgla. bẽ ... qs sub ũgla. bẽ ... qs pẽ ... dunde ... pi ... exibẽt ... pqlibet dunsio ... si dunsio ... p ... lẽb ... pdunsio ... ut supi mdicptõe ostẽdit. Quia si plus ponẽtur sub eadẽ ungla silr ... Dunsio ...

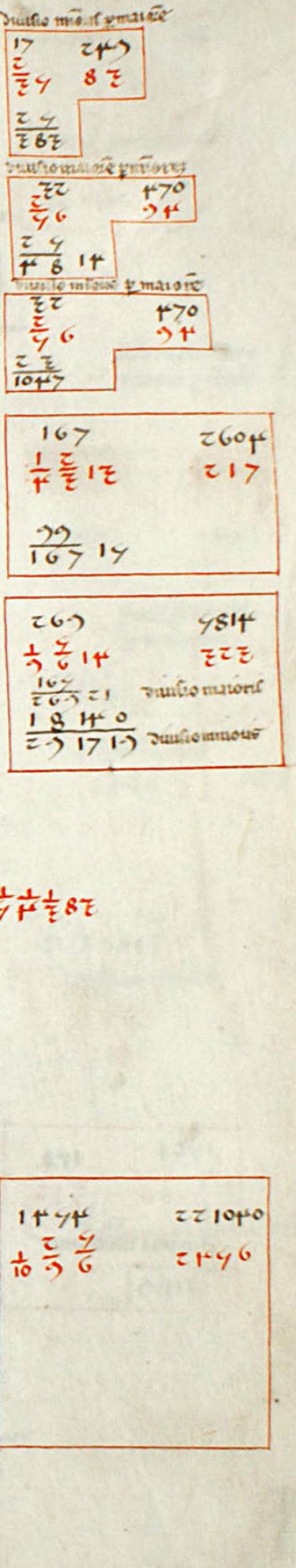
Si uoluĩt dunde ... dicẽ nũos ... mta ... pluas ũglas ... duo ... qs pẽ ... dnĩ mt ... p nũos qs sub ũgula. unde ... ut i una mta ... silr ... qs pẽ ... dunde ... p ... exibẽt ... pqlibet dunsio. Et si ... p regla ... dunsio exibit ... pdunsio ... ut ... ut incadẽ supion dicptione ostendit. Dunsio ... per ...

Tertiũ uoluĩt dunde ... p ... qd ut hic dunsion sm dnĩ ostensu modũ fiat ... cũ qlibet cuiũdo eoĩ tarẽ tuptatiũ si debeant ostendi. primũ dicẽ qdz. dnĩ mt ... pluas ũglas. cuiũdo cũ sic mtb ... p ... addẽs ... qs pẽ ... dnĩ ... pqlibet eoĩ tarẽ ... quã bẽ ... aĩ ... se ... coĩl ... ipoz. et octauedcie ... si qs addẽ ... de ... dnĩ ... ita ... qs sub ũgla. bẽ ... et octauedcie ... ut ... addo ... aĩ ... et ... Qr nũ ... p ... addr ... et silr ... octauedcie qs pẽ ... mt ... aut p ... pluã ... aut p ... pluã ... p coĩtatẽ ipoz. g mtb muta mta ... p ... pqlibet eoĩ tarẽ ... et octauedcie qs pẽ ... dnĩ dunde ... exibẽt ... pqlibet dunsio ... Nam si ... p ... dunsio repias ... pdunsio ... ut supi mdicptõe ostenditur.

Dunsio ...

Sdaũ uoluĩt dunde ... dicẽ nũos. mt ... pluas ũglas ... sime ... pẽ g ... si ... p ... qbz ea sm qd innotoibz ... p ... mostrabim. E ... pela ipoz ... p septenariũ. ut oportet. qua pela pẽ ... mt ... p nũos qs sub ũgula ... bẽ ... qs ... ut una mta ... sime ... qs pẽ si ... Et si ipos pẽ pela ipoz p septenariũ qẽ ... dnĩ dunde ... pregla ... qẽ ... exibẽt ... p qlibet dunsio ... ad ... pueniẽt. ne pela ipi dunsios ... sicut ... p regla ... dunsio. lẽb ... pdunsio ... Dunsio ...

Tedunsioĩs pela ... p ... sicut ... sic intelligat ... Tem alia ... di meli intelligat ... ut dunsio ... p ... dicẽ qos ... mt ... pluas ũglas cuiũdo sic mtb ... p ... addes ... si mt. p ... qs sub ũgula. qr ... mta ... p ... qs pẽ ... dunde ... p ... exibẽt ... pqlibet dunsio ... Dunsio ...



p 10 cr̃ nonagelime 20 q̃l ñ opõtz mlre p 6 q; tot 6 cõia g̃ regl' d' 9 d' Mã r'g
6 ẽ 1/2 0 1/2 ilti regle ẽ d' r' d' 10 q̃ẽ 1/2 0 1/4 Cr 1/4 q; remanz d' 6 fr' i r' d' 9 aũ upã sur 1/2 0 1/2
duũ mt' 1 q̃ẽ fr' 10 p 9 cr̃ nonagelime 9 q̃l ñ oportet p 6 pp cõitatẽ pducã mlt'
Hdc g̃ nonagelimal 9 iuent aũ nonagelimq̃l 20 9 aũ nonagelimal 1 r' 4 cr̃ non
gelime 1 r' 41' q̃ru pela p septenariũ ẽ 4 pcẽ g̃ 1 r' 4 fr' 14 9 fr' rupt; sup 4 4
ppela pcẽ d' fr'. Potel ẽ alr' d' 1/10 3/9 3/6 14 nonagelimal facẽ. tm notãdũ ẽ p'mũ
q̃r ũ nonagelime fi' dleat. Debz ẽ fi' pp 1/10 3/9 3/6 q̃ repũt' i 9 Cr ẽ mnor nũl
i q̃pẽ fmatõ; repũt. q̃r mlta 14 p 9 cr̃ nonagelime 1 r' 40 fr' q̃l ade 1/10 3/9 3/6
d' 9 q̃ fr' nonagelie 10 r' cr̃ filr' nonagelie 1 r' 41' pen fne nonagelial d' r' 46
cr̃ nonagelie r r 10 r' 0 q̃l pcẽ fr' r' 46 9 dumd' r r 1 0 r' 9 erabt 0/r 16/7 27 14
p q̃lm dumlicẽ. Cr fi 1 r' 41' p regla d' r r 10 r' 0 dumfit. hẽb dumlioz d' 1/10 3/9 2/6 14
ip r' 46 Que dumlio ẽ 6/8 1/9 0/10 r/07 ut supr i q̃ẽ ostẽdit. p regla d' 8 1 r' 41'

Incipit pars quarta d' aditõe extractõe seu diuisione rerũ mior aũ rupt'

Cm aũ aliq̃ẽ nũz aũ uno rupto ut plib; addẽ uolũt aũ q̃lib; alio nũo filr' aũ uno rupto ut plib; ut minorẽ rpõdũ aũ suo rup
to ut rupt' d' maiori aũ suo rupto ut rupt' extẽdẽ. seu alig rpõz
p altũm dumdẽ. dslẽbe minorẽ nũm aũ suo rupto ut rupt' sp
tertiũ tabule pcẽ. Maiorẽ uo aũ ill rupt' i eadẽ linea ũlut simultãa. sicut rp
cedẽti pcẽ d' mõstrauim. q; mt'. minorẽ nũm p suã ugla sicut supr' dctum'.
q; summa põz nuiõr; q; fuit' sub ugla. ut' ugut'. maiorũ nũ mt'. Cr mlo q; euenit
fr' plepti nũm minorẽ rel'na. d' ñ maiorẽ nũm. p suam ugla ut' ugla. q;
pz nuiõr q; sub ugla. ut' ugut' minorũ nũ mt'. Cr hãc summa rpm maiorẽ nũz
dslẽbe. Cr si uolũt addẽ. addez rpõz miõz repto; q; adunatã summa. põz rupt;
q; fuit' i pcẽde dumd'. q; hẽb additõem rpõrũ. Cr si minorẽ d' maiori extẽdẽ uolũt
extẽdẽ rept' nũm q; pmã fr' minorẽ nũm d' repto miõ q; rpõm fr' maiorẽ rel
duũq; pz ruptoz fili' dumd'. q; hẽb reliduũ q̃ẽ ie maiorẽ q; minorẽ. Cr si maiorẽ
p minorẽ dumdẽ uolũt maiorẽ repti nũm p minorẽ repti nũm dumd'.
Cr si minorẽ p maiorẽ dumdẽ uolũt dumd' minorẽ repti nũm p maiorẽ re
pti nũm. q; sic hẽb q̃ẽ uolũt rpõz dumlionẽ. Cr ut hec oĩa apti intligat sin
gulanẽ ea aũ pcẽdẽz nuiõr. pfectiõr pcedat' d' mõstrãdũ. Addimo d' 1/2 12 aũ 2/4 16

Si uolũt addẽ 1/2 12 aũ 2/4 12 6 dslẽbe nuiõr ut h ostẽdit'. q; mltãbit 12 p
suã ugla cr̃ tne 7 q̃l mlt' p 1 r' q̃z sub ugla p' 12 6 cr̃ xii. 1 r' 8 q̃l pcẽ fr' 1/2 12
dnã mt' 12 6 p suã ugla cr̃ quatuor 4 0 7 q̃l mlt' p 2 q̃z sub ugla p' 12 cr̃ duodecie
1 4 7 1 q̃l pcẽ fr' 2/4 12 6 Add inq; duodecias 1 r' 8 aũ duodecias 1 4 7 1 cr̃ duodecie
1 6 6 9 q̃l dumd' p utrãq; rupturũ. utrobiq; p 2 q 1 r' ut in una dumlicẽ p 12 erabt
1/12 12 9 ut inq̃ẽ ostẽdit'. de eodem

1 4 7 1	1 r' 8
2/4 12 6	1/2 12

Summa nunciõis
1/12 12 9

Potel ẽ huic cõi adiuatõm alr' repere ut addat integr aũ integr utrobiq; 12 aũ 12 6 cr̃
12 8 dnã addẽ rupturũ i unũ. s. 1/2 aũ 2/4 sicut supr' in prima pte h; q; dr' fi
stinctiõ. erit 1/2 1 q; add' aũ 12 8 cr̃ 1/2 12 9 ut mõ p' plepta utrobiq; in

Cum si $\frac{1}{2}$ 12 d $\frac{7}{11}$ 12 6 ecbe uolum dsclel qom ut sup. 7 replel Extrahod $\frac{1}{2}$ 12 d $\frac{7}{11}$ 12 6
plepta 148 7 1471 7 ocbes 148 d 1471 remanebt duodcie 1277 qsl dund sta
mate p 12 ecabt mteg $\frac{5}{12}$ 11 p reliduo dicte ecctionis ut mqoe ostenditur.
Et alr. Excbe mteg d mteg. udel 12 d 126 remanebt 11 diu ecbe $\frac{1}{2}$ d $\frac{7}{11}$ re
manet $\frac{5}{12}$ qsl add ai 11 et $\frac{5}{12}$ 11 silr. Et si dundt uolum $\frac{7}{11}$ 126 p $\frac{1}{2}$ 12 dundel 1471
pr d 148 qt $\frac{1}{11}$ $\frac{0}{7}$ 7 calbt $\frac{1}{11}$ $\frac{10}{77}$ 10 p qsltm duntlet ut in sua dmostrat dsleprte.
Tc si minoie p maiore dundt uolum. s. $\frac{1}{2}$ 12 p $\frac{7}{11}$ 126 reptt qd 148 7 1471 dundeg
148 pr d 1471 qt $\frac{1}{5}$ $\frac{0}{12}$ $\frac{0}{12}$ calbit $\frac{11}{5}$ $\frac{7}{12}$ $\frac{1}{2}$ unt integ. p qsltm duntlet. Addc
sub $\frac{7}{11}$ 12 ai $\frac{7}{4}$ 171 actt uolum dsclel nuos ut pdixim. et nod $\frac{7}{11}$ 12 ai $\frac{7}{4}$ 171
mtca 12 p 11 7 add 7 qst silr 11 et qtro 4 4 qlmt p 4 qst sub ugla p 171 et ugelie.
7 74 qsl pte slr $\frac{7}{11}$ 12 Et mt 171 p sua ugla. s. p. 4 7 adde 7 et qnte 847 qsl mtca
p 11 qs sub ugla p 12 et ugelie. 7 11 28 qsl pte slr $\frac{7}{4}$ 171 dm adde 7 74 ai 7 11 28
et. et 7 70 7 qsl duud p rup. s. p 11 7 p 4 qm sut sub ugut utrusq; nm qs
but $\frac{1}{10}$ 184 p quelibt uncie. Pbano stt uctois.

Hoc uicio si recta e ita p 7 cogslat pela d 12 qt 6 p 11 mtca. 7 d slr add 7 qs slr 11 et 7
qnu pela qt 6 ita nu p 4 qs sub ugla mtca. et 70 qnu pela qt 7 e pela d 74 silr stu
dal reptr pela d 11 28 p ppoz ongine sic. Pela d 171 qt 7 p sleptenariu mt
p 4 qs sub ugla. 7 adde 7 qs slr 4 et 17 quoru pela qt 7 mt p 11 qs sub ugla. et
quoru pela qt 4 debz ee pela d 11 28 7 qz ttq e sam recte p cessisse ai bum
qnu 11 ita e. qua pela pte slr 11 28 dm add pela d 74 uidlicet ai pela d
s. ai 4 et 7 quoru pela qt o ung p pela sume. uicio. Ordem addite

Dcl e p sleptu uicioy alr inuenire. udel ut addas 7 ai 71 et 28 11 7 $\frac{7}{11}$ ai $\frac{7}{4}$ ett
$\frac{1}{10}$ 1 q add ai 8 11 et $\frac{1}{10}$ 1 184 ut p eam uicio reptu e. Extracto d $\frac{7}{11}$ 12 d $\frac{7}{4}$ 171
Et si $\frac{7}{11}$ 12 d $\frac{7}{4}$ 171 ecbe uolum. ecbe 74 d 11 28 remanet 14 7 q dund p rup
tog. calbt $\frac{6}{10}$ 147 p reliduo quelibt exctionis.

Quod reliduu si recta sit. ita p 7 cognoscat pela d 74 qt 7 d pela d 11 28 qt
4 ecbe. reliduu uo q e 7 habeas p pela d $\frac{1}{10}$ 6 147
Si una e $\frac{7}{12}$ 12 alr d $\frac{7}{4}$ 171 ecbe udel ut extrahal 12 7 $\frac{7}{11}$ d 171 remanet $\frac{1}{11}$ 147
ai qd add $\frac{7}{12}$ et $\frac{1}{11}$ $\frac{7}{4}$ 147 hoc e. $\frac{1}{7}$ $\frac{0}{10}$ 147 Duntio $\frac{7}{4}$ 171 p $\frac{7}{11}$ 12.
Et si 171 p $\frac{7}{11}$ 12 dundt uolum dund 11 28 p regla d 74 qt $\frac{1}{4}$ $\frac{0}{7}$ 11 calbit
$\frac{7}{4}$ $\frac{0}{7}$ 11 12 p qsltm duntlet. qnu pela debz ee 4 p 7 hoc e d 11 28 q dundum
Et si 11 p $\frac{7}{4}$ 171 dundt uolum dund 74 p regla d 11 28 qt $\frac{1}{11}$ 847 calbit
$\frac{7}{11}$ $\frac{67}{847}$ unt integ qnu rupturu pela p sleptenariu e 7 sicut fuit d 74

Tem si uolum addt. $\frac{7}{6}$ 11 ai $\frac{7}{5}$ 11 dsclel nuos ut h ostendit. Et quia $\frac{7}{6}$ 11 addicio $\frac{7}{6}$ 11 ai $\frac{7}{5}$ 11
hac uicio p stm modu fiet possit. cm pp coitatu qua bnt $\frac{7}{6}$ ai $\frac{7}{5}$ qlt h ai cuntatu
fi debeat iducm. o h utq 11 p 6 7 addel 4 et secte 8 7 qsl mt p 7 .s. p tta pte d.
pp coitatu qua bnt 6 ai 7 et. viii. 67 qsl pte slr $\frac{7}{6}$ 11 7 plu est p pela qua hb. e e
pela ipa 7 p 7 qt pte slr 67 dm mt 11. p 7 add 7 et none 81 qsl mt pta d
6 be p 7 et silr. viii. 167 qsl pte slr $\frac{5}{11}$ 7 19 slr est pte pela ipa inuen. silr p

Desepto diuisionis
1471 148
$\frac{7}{11}$ 126 $\frac{1}{2}$ 12
Residuu extractionis
$\frac{7}{12}$ 11

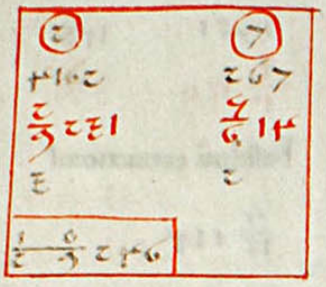
Desepto diuisionis
1471 148
$\frac{7}{11}$ 126 $\frac{1}{2}$ 12
diuisio minoris p maiore

Desepto diuisionis
1471 148
$\frac{7}{11}$ 126 $\frac{1}{2}$ 12
diuisio, minoris p maiorem
4 7 1
5 12 12

Desepto uicionis
7 74
11 28
$\frac{7}{4}$ 171 $\frac{7}{11}$ 12
1 1
7 10 184

Desepto extractionis
$\frac{7}{4}$ 171 $\frac{7}{11}$ 12

Desepto instrumenti diuisionis
$\frac{7}{4}$ 171 $\frac{7}{11}$ 12



2	7
4162	267
$\frac{2}{9}$ 221	$\frac{5}{6}$ 14
3	2
$\frac{1}{2}$ $\frac{0}{9}$ 246	

13 que est 2 pro hoc addo 267 cum 4162 erunt 4429 que diuido per unum ex ruptis quale uoluerimus. et per partem
communitatis alterius. hoc est. aut diuides per 6 et per tertiam de 9 s. per 3 aut diuides per 9 et per tertiam de 6 uidelicet per 2
exibunt $\frac{1}{2}$ $\frac{0}{9}$ 246 pro quesita uinctione. cuius summe pensa est 9 per 13 que exit ex uinctione pense de 267 que est 7
et de 4162 que est 2 Et ut hoc intelligibilius fiat. diuido 6 et 9 per communitatem eorum s. per 3 exibunt 2 et 3
pone itaque 2 sub 6 et 3 sub 9 et multiplica 89 per 3 posita sub 9 et 2081 per 2 posita sub 6 et
habebis numeros sectos. quorum adductionem diuido per unum ex numeris qui sunt sub uirgis. et per numerum positum sub alio
s. per 6 et per 3 uel per 9 et per 2 Potes esse aliter $\frac{5}{6}$ 14 cum $\frac{2}{9}$ 221 addere uidelicet ut addas primum 14 cum
221 erunt 245 unde addo $\frac{5}{6}$ cum $\frac{2}{9}$ erunt $\frac{1}{18}$ 1 que addo cum 245 erunt $\frac{1}{2}$ $\frac{0}{9}$ 246 ut superius per priorem
modum reperta sunt. Extractio de $\frac{5}{6}$ 14 de $\frac{2}{9}$ 221

Et si $\frac{5}{6}$ 14 de $\frac{2}{9}$ 221 extrahere uoluerimus extrahes 267 de 4162 remanebunt 3895 quorum pensa
est 8 per 13 que sic reperitur. s. cum non possis extrahere 7 que sunt pensa de 267 de pensa de 4162 hoc est de 2 debes
addere numerum pense uidelicet 13 cum 2 per scriptis faciunt 15 de quibus extrahe predictam 7 remanent 8 pro pensa
de 3895 ut prediximus. diuides itaque 3895 per $\frac{1}{2}$ $\frac{0}{9}$ supra scripta ratione exibunt $\frac{1}{2}$ $\frac{3}{9}$ 216 pro residuo

Aliter extrahe 14 de $\frac{2}{9}$ 221 remanent $\frac{2}{9}$ 217 de quibus extrahes $\frac{2}{9}$ 1 cum non possis $\frac{5}{6}$ Sed dicte extractionis
de $\frac{2}{9}$ extrahere remanebunt 216 et extrahes $\frac{5}{6}$ de $\frac{2}{9}$ 1 facies xviii. ex eis remanebunt $\frac{7}{18}$ quibus
additis cum 216 faciunt $\frac{1}{2}$ $\frac{3}{9}$ 216 ut superius reperta sunt Diuisio de $\frac{2}{9}$ 221 per $\frac{5}{6}$ 14

Veniamus si $\frac{2}{9}$ 221 per $\frac{5}{6}$ 14 diuidere uoluerimus diuido 4162 per regulam de 267 exibunt $\frac{1}{3}$ $\frac{52}{89}$ 15
pro quesita diuisione. Diuisio de $\frac{5}{6}$ 14 per $\frac{2}{9}$ 221

267 Item si $\frac{5}{6}$ 14 diuidere uoluerimus per $\frac{2}{9}$ 221 diuido per regulam de 4162 exibunt
$\frac{1}{2}$ $\frac{133}{2081}$ pro quesita diuisione. Addictio de $\frac{1}{4}$ $\frac{1}{3}$ 15 cum $\frac{1}{7}$ $\frac{3}{5}$ 322

Item si $\frac{1}{4}$ $\frac{1}{3}$ 15 cum $\frac{1}{7}$ $\frac{3}{5}$ 322 addere uoluerimus describe numeros ut hic ostenditur. et multiplica 15 per suas
uirgulas s. per 3 et addo 1 que per 4 et addo multiplicem de 1 que est sicut 4 in 3 erunt xii. 187 quas multiplica per numeros qui sunt
sub uirgulis per 322 s. per 5 et per 7 erunt quadragesime uigesime 6545 quas pone sicut $\frac{1}{4}$ $\frac{1}{3}$ 15 de numero multiplica 322
per suas uirgulas erunt trigesime quinte 11296 quas multiplica per numeros qui sunt sub uirgulis per 15 erunt quadragesime
tesime uigesime 135552 quas pone sicut $\frac{1}{7}$ $\frac{3}{5}$ 322 de numero addo 6545 cum 135552 erunt
centesime 142097 quas diuido per 420 hoc est per numeros qui sunt sub uirgulis. et aptabis ipsos exibunt
$\frac{5}{6}$ $\frac{1}{7}$ $\frac{3}{10}$ 338 pro quesita uinctione cuius pensa est 10 per 11

Aliter uinge 15 cum 322 erunt 337 et addo $\frac{1}{4}$ $\frac{1}{3}$ cum $\frac{1}{7}$ $\frac{3}{5}$ secundum quod decimus in secunda parte hoc capitulo erit
$\frac{5}{6}$ $\frac{1}{7}$ $\frac{3}{10}$ 1 que addo cum 337 erunt $\frac{5}{6}$ $\frac{1}{7}$ $\frac{3}{10}$ 338 ut prediximus Extractio de $\frac{1}{4}$ $\frac{1}{3}$ 15 de $\frac{1}{7}$ $\frac{3}{5}$ 322

Et si $\frac{1}{4}$ $\frac{1}{3}$ 15 de $\frac{1}{7}$ $\frac{3}{5}$ 322 extrahere uoluerimus extrahe 6545 de 135552 remanebunt
129007 que diuides secundum demonstrationem per $\frac{1}{6}$ $\frac{0}{7}$ $\frac{0}{10}$ exibunt $\frac{1}{6}$ $\frac{4}{7}$ $\frac{1}{10}$ 307 pro residuo que sunt extractionis.

Aliter extrahe 15 de 322 remanebunt 307 et extrahe $\frac{1}{4}$ $\frac{1}{3}$ de $\frac{1}{7}$ $\frac{3}{5}$ remanebunt $\frac{1}{6}$ $\frac{4}{7}$ $\frac{1}{10}$ que addo cum
307 erunt $\frac{1}{6}$ $\frac{4}{7}$ $\frac{1}{10}$ 307 ut prediximus. Veniamus si $\frac{1}{7}$ $\frac{3}{5}$ 322 per $\frac{1}{4}$ $\frac{1}{3}$ 15 diuidere uoluerimus diuido
135552 per regulam de 6545 exibunt $\frac{260}{4711}$ $\frac{12}{1720}$ pro quesita diuisione. Diuisio $\frac{1}{4}$ $\frac{1}{3}$ 15

Item si $\frac{1}{4}$ $\frac{1}{3}$ 15 per $\frac{1}{7}$ $\frac{3}{5}$ 322 diuidere uoluerimus diuido 6545 per regulam per $\frac{1}{7}$ $\frac{3}{5}$ 322
de 135552 exibunt $\frac{520}{688}$ $\frac{17}{343}$ pro quesita diuisione. et sic secundum prescriptum modum quolibet cum ou
numeros obiectis ruptis addere. et extrahere et diuidere potes tamen alias quasdam questiones ex quibus euitare possumus
communitatem regule ruptorum ad presens proponimus demonstrare. Addictio $\frac{1}{5}$ $\frac{3}{4}$ 16 cum $\frac{1}{9}$ $\frac{4}{5}$ 422

Si uoluerimus addere $\frac{1}{5}$ $\frac{3}{4}$ 16 cum $\frac{1}{9}$ $\frac{4}{5}$ 442 describes numeros multiplica primum 16 per suas uirgulas erunt

cc. 7 7 7 q̄l ai dolat mlīe p 4 7 p 7 q̄ꝫ sub alus ugit ñ mlt' ñ cō p 7 ꝑalia 4 q̄ ſt
sub ugla p. 7/12 16 cc clxxxc. 7041 q̄l ſua ſr 1/4 7/12 16 dim mt' 4 4 7 p ſuas ugl's cc
clxxxc. 1977 q̄l mt'. dim p 4 q̄ꝫ sub ugla p' 16 q; relinq̄l mlīe p 4 luꝑdca rōe. cc q̄ nō
ſunt. clxxxc. 7977 4 q̄l pōe ſr 1/3 4/7 4 4 7 dim add 7041 ai 7977 4 cc. clxxxc.
8 7774 q̄l duob' p 180 ut p ōl nūot q̄ꝫ sub ugl's pē quia p unū eccluob; q̄nam.
q; ſicuta reliq̄t. q̄nq; īmlīe um' auſp duoū nūoꝝ ꝓlēptoū uta debō; relīq̄ īdunſlīe
ſūme uicētoſi ꝓoū. ḡ dundel 8 7774 p 1/4 0 0/40 7 cantab in 1/4 ecbt 7/12 7 4 40. pq̄lita uī cc.
El poſt addē in reg̃ ai in reg̃l. 7 q̄ntū ai q̄ntl 7 7/12 ai 1/3 ut in ꝓcedēnb; dcm mug. et
iēbnl ſilr ſūmā eundē umeroīl. Extracto 1/4 7/12 16 d 1/3 4/7 4 4 7
Tcaūſi 1/4 7/12 16 d 1/3 4/7 4 4 7 cclē uoluīſ ecclesg 7041 d 7977 4 remanebit 7667
q̄ſtā rōe duudcc p 1/2 0/3 0/10 ecbt 1/3 2/10 4 7 4 ꝓcludo q̄ſtc ecctoīs. ut ecclesg 1/4 16 d
1/3 4/7 4 4 7 remañ d 1/3 7/4 ſi possibile cēt. 9; q; possibile ñ cē ecclesg 1/4 1 d 1/3 7/4 4 7 6
remañ 4 7 4 dim ecclesl 7/12 d ꝓlēpto 1/3 7/4 1. remanebit 1/2 3/3 0/10 āpli's 8 4 7 4 p cod' retrouo
trſuſſi 1/3 4/7 4 4 7 p 1/3 7/12 16 duudē uoluīſ. duud 7977 4 p regl'a d 7041 ecbunt
7/12 6 12/3 1/12 7 6 p q̄ſtā duuſlīe. Et ſi 1/4 7/12 16 p 1/3 4/7 4 4 7 duudē uoluīſ. duud 7041
p regl'a d 7977 4 ecbt 7/12 7627/1977 1 p q̄ſtā duuſlīe. Addno 1/6 7/4 17 cū 1/10 7/3 4 7 4.
Suō 1/6 7/4 17 cū 1/10 7/3 4 7 4 adde uoluīſ. d ꝓlēptus nūīſ mlīa 4 p 6 q̄ꝫ sub ugl's eī 7 0
cc 7 p 6 q̄ꝫ sub alus ugl's altūus laūſ eī 7 0 rene 7 0 ym manu dcm. 7 0 ſimlīe. 7 duud
ea p mnoīe coītatē quia bīnt ad iuuīe. ſ. p 7 0 ecbit 1 in manu dcm. 7 7 in ſimſtm.
ꝓē ḡ 1 sub 1/6 7/4 7 7 sub 1/10 7/3 us in qē uīe. 7 mlīa 17 p ſuas ugl's eī 4 7 7 xcc.
q̄ſmlt. p 7 poīta sub 1/10 7/3 eī 1481 nonagelime. q̄l pōe ſr 1/6 7/4 17 d in mlīa 4 7 7 per
ſuas ugl's eī ſilr nonagelime 7 1 4 7 q̄l mlīa p 1 poīti sub 1/6 7/4 eī ſilr 7 1 4 7 no
nagelime. q̄l pōe ſr 1/10 7/3 4 7 7 7 add ea cū 1481 eī 8 7 7 0 q̄ duud p nuīg; q̄ꝫ sub
ugl's unī latūſ. 7 p nūm poīti sub ugl's altūus. bē p 4 7 p 6 7 p 7 ut p 7 7 p 10 7 p 1
7 lic cader diuſio 7 0 q; opꝑtet ut ſūma ꝑtū nonagelimaꝝ rem integre' ecbt p q̄ſti
ta uīcīe 4/3 4 4 1 bē ē modū ſtudal ecnē in oīb; ſilīb; cū ſit ꝓāntor ecclesg 7 meliot.
Et ſi 1/6 7/4 17 d 1/10 7/3 4 7 7 ecclēs uoluīſ ecclesg 1481 d 7 1 4 7 relidua ḡo q̄ſuīt
7 4 4 6 8 duudcl ſtā rōe p 1/3 0/10 ecbt 4/7 3 4 0 6 ꝓcludo q̄ſtc ecctoīſ. Vt ecclesg
17 d 4 7 7 remanebit 4 0 6 7 ecclesg 1/6 7/4 d 1/10 7/3 remanebit 4/7 3 ut ꝑdiximus. Duu
Imſi 1/10 7/3 4 7 7 p 1/6 7/4 17 duudē uoluīſ. duudcl 7 1 4 7 p ſ ſio d 1/10 7/3 4 7 7 p 1/6 7/4 17.
1481 Et ſi duuſlīſ 1481 p 7 1 4 7 lēb duuſlīo 7 d 1/6 7/4 17 in 1/10 7/3 4 7 7 ut in
ꝑcedentb; ſingltīē dm onſtimuum. Ina pte parſ q̄nta d addenda cē extone seu duuſlone

Si uoluīſ adde 7/12 d 7/3 7 7 cū 7/3 d 7/3 12 8 d ecclesg ꝑtīū nūoꝝ ſr ecg; cū rupas
nuīg; uo h' oſtēdit. Et mlīa 7 7 p 4 7 add 7 cc 1 4 7 q̄ mlt' p 7 7
ſr cc 7 4 1 q̄ mlt' 7 q 7 7 q̄ꝫ sub ugla alūus nūī cc 7 7 7 8 7 dim
q̄ pōe ſr 7/3 7 7 quoū pēla cē 8 p 11 q̄ regnb; ſm q̄ mlīa un. dim
12 8 p 7 7 add 7 q̄ 4 4 q̄ꝫ ſr 7 cc 4 7 7 0 q̄ mlīa p 4 7 4 7 q̄ꝫ sub ugl's alūi nūī.
cc 1 1 4 7 00 q̄ pōe ſr 7/3 12 8 7/4 7 cē pēla ꝑē 10 p 11 add 7 7 7 8 7 cū 1 1 4 7 00
cc 1 4 7 2 1 8 7 q̄ duud p q̄ꝫ rupas. ſ. p 1/2 0/4 7 7 7 q̄ſ 1/2 7/3 7/10 1 1 7 ꝑ

(10) 1 1 4 7 00 (8) 7 7 7 8 7
7/3 12 8 7/4 7 7/4 7 7 4
.addicio.
1/2 7/3 7/10 1 1 7
extracto
1/2 7/3 7/10 7 7

unctione. Exnunod ℥ ꝛ ℈ ℥ ꝛ ℈ ℥ 1ꝛ8 ℥

Si ℥ ꝛ ℈ ℥ ecclē uul ℈ ℥ 1ꝛ8 ℥ ecclē ℥ ꝛ ꝛ ꝛ ℈ 1147 00 remanꝫ 87617 q
silr dund' p ℥ ℥ ℥ ℥ ecclē ℥ ℥ ℥ ℥ ℥ ℥ p reliduo queliꝫ exactiōꝫ.

Arsul si ℥ ꝛ8 ℥ p ℥ ꝛ ℈ dunde uoluīt repul plcpul Duusiod ℥ ꝛ8 ℥ p ℥ ꝛ ℈ ℥
nuīt. ſ. ꝛ 778 ꝛ 711 47 00 studul iuenire r' ℈ ꝛ 778 ꝛ q ℥ ℥ ℥ ℥ ℥ Et dund' p q
1147 00 ecclē ℥ ℥ ℥ ℥ ℥ p quelim duusiōis

Adhuc si ℥ ℈ ℥ ꝛ ℈ p ℥ ℈ ℥ ꝛ8 dunde uoluīt dundel ꝛ 778 ꝛ p ℈ 1147 00 ecclēt
℥ ℥ ℥ ℥ ℥ p quelim duusione.

Saū ℥ ℥ ℈ ℥ ℥ ꝛ aī ℥ ℥ ℈ 11 ℥ ꝛ 1 ꝑ adde uoluīt. dſcbeg nuīg ut b ostēdit. 7 mlta
ꝛ p 7 add' q ꝙ ſlr 7 q p 7 add' ℥ er lcūi. ꝛ 116 Jce mlt' ꝛ ꝙ ſlr ꝑ p 7 q ꝙ ſlr q
p 1 7 add' m ſunt' er. xc ℥ ql mlta p. lxx. uii. ꝛ 116 iuenal. er. ℎ. cc. lxx ꝑ 0 ꝛ 0 1 qui
pela p ꝛ ut nullu m' acceptaē 8 que nūg. ſ. ꝑ 0 ꝛ 0 1 aī delet ꝙ mlta p ꝯ rup q ꝙ
sub ugul' alt' latūl. ſ. p 7 q ꝑ ꝙ sub p'ma ugla illl latūl. 7 p 6 q p 11 relinq p'mū q
ū mlt' p 7 ñ ꝑ 1 p 7 q 1 ꝙ sub ugul' p'mu latūl. Et relinq ū ū mlt' p ꝛ ꝙ unu
gla d ducal 6 p ꝛ ꝙ ſ ī r' d ℥ q ℥ ſt sub ultīa ugla p'mu latūl. ℎ mlt' ꝑ 0 ꝛ 0 1 p ꝛ
q remanꝫ d ugla dcīi 6 q p 11 b ē iuna mlta p ꝛ ꝛ er. xc vñ. dcc. xx. 8 81 1 8 8 ꝙ
pe ſlr ℥ ℥ ꝛ ℈ ℥ dlr pela q ē 7 dui mlta ꝛ 1 1 p 6 ꝙ sub ugla 7 add' 1 q
ꝙ ſlr 6 er sexte 1 1 6 ℥ ql mlt' p 11 7 sup add' mltoꝫ d 1 q e ſlr 11 16 er lcc vi. 16169
Quar pela sub p ꝛ ē 6 Jce mlt' ꝛ ꝙ ſlr 7 p 1 7 add' 1 q ℎ ſlr q ē er. xcc. vii ꝙ ql mlta
lcc vi. 16169 er. ℎ. dcc. lxx. vii. ꝛ 101 1 4 Quar aī delet mltr p ꝯ nuīg ꝙ ꝙ sub ugla
p'mu latūl relinq ſtīg dispoīt q ū mlt' excal ñ ꝯ p ꝛ q remanꝫ d regla d ℥ 7 p 4 bē
iuna mlta p 1 4 er sltr. xc vii dcc. xx. ꝛ 1 4 ꝛ 1 7 4 sicut fuer ulc alīus latūl. Ds
pcīg uīg ſlr 11 ℥ ꝛ 1 1 ℥ ℥ ℥ ℈ dlr pe ena pela q ē 0 dn̄ add' 88 1 1 8 8 aīq
ꝛ 1 4 ꝛ 1 7 4 er 1 0 ꝛ 666 ꝛ q dundel p ꝯ rup q uni aūlū latūl. 7 p rup q
q accipiūt ī mlta er altō latē. vr pte p 1 7 p 4 p ℥ 7 p 7 q ꝙ in p'mo latē. 7 p q
ſur ī regla d 6 7 p 11 altūs latūs q accipiūt ī mlta p'm mū. ut p 7 7 p 1 7 p 6 7
11 q ſ ī ſo latē. 7 p ꝛ q ꝙ ī r' d ℥ 7 p 4 q ꝙ ī altō latē ecclē ℥ ℥ ℥ ℥ ℥ ℥ ℥ 1 1 4 p que
ſtiꝫ unctione. Exnunod ℥ ℥ ℥ ℥ ℈ ꝛ ℈ 11 ℥ ꝛ 1 1 ℥ ℥
Imſi d ℥ ℥ ℈ 11 ℥ ꝛ 1 1 uoluīt ecclē ℥ ℥ ℈ ℥ ℥ ℈ ꝛ ꝛ ut aliq̄ ꝓ ꝓ relinq̄ ū
Nudē repiet ſto modo. 7 ordine p̄cpta. 88 1 1 8 8 7 ꝛ 1 4 ꝛ 1 7 4 7 excpūl op abꝫ fm
quod supi in hoc capitulo in ecctiōe 7 duusione decuī.

Tem si uoluīt add' ℥ ℥ ℥ ℈ ℥ ℥ ℈ 11 ℥ ℥ 1 ℥ ꝛ ꝛ aī ℥ ℥ ℥ ℈ ℥ ꝛ ꝛ 1 dſcbe nūg ut
b ostēdit. Et ma pial mltr ꝛ ꝛ p sual' ugtāl q ꝯ ei ret' er ꝛ 0 ꝛ 1 1 Et accipe ℥ ℥ ℥
7 mltāl 7 q ꝙ ſlr 7 p 8 7 add' ꝛ q p 7 7 add' ꝛ er ꝛ 0 ꝛ q mlta aī ꝛ 0 6 1 1 er ꝛ 0 ꝛ 8 1 ꝛ ꝛ
q aī dlcal mltr p ꝯ nuīg q ꝙ sub ōbz ugul' altūs latūl. ſ. p 7 7 p 8 7 p 7 q ꝙ sub
ibz ugul' illi latūl 7 p 11 7 p 1 7 p ꝛ q ꝙ sub una ugla. relīq ū repet ea mltando
q ū ū r' ī b p'mo latē. g relicat ullū ſrestar q ū mlt' 7 ꝛ 8 1 ꝛ ꝛ er ꝓpūl ñ ꝯ p ꝛ q
mltando a ſcdar ī ꝛ 8 1 ꝛ ꝛ 6 quē nūy pe ſlr p'mū lat'. dñ ut inuenal nūy
altūl mlt' ꝛ ꝛ 1 p sua ugtam q ō ei ret' er 1 6 6 ꝛ Et repiet nūy relīq suar

Duusio maioris p minorē
℥ 0 ℥ ℥ 1
℥ ℥ ℥ ℥ ℥ ℥
Duusio minoris p maiorem
1 1 ℥ 1ꝛ8
℥ 10 10 1 1 7 7

0 7
ꝛ 1 4 ꝛ 1 7 4 88 1 1 8 8
1 11 ℥ ꝛ 1 1 1 ℥ ℥ ℥ ℥ ℥ ℥ ℥ ℥ ℥ ℥
pela ꝑ ꝛ · 7
℥ ℥ ℥ 8 6
℥ ℥ ℥ 10 11 1 1 4

℥ ℥ ℥ ℥ ℥ ℥ ℥ ℥ ℥

ūi ūglaz. ſ. d 1/8 1/4 ſiuīt 179 ꝑ quē mlta 4 6 7 ei 7 6 18 7 0 8 q̄ aī dbeas
mlte ꝑ oēs nuōs q̄ ſ̄ ſub ōib; ūgul' ꝑma latūl. ſ. p 1 7 9 p 1 7 p 4 q̄ ſ̄ ſub ūbz ūgul' ull
ꝑma latūl. 7 p 7 7 p 8 7 p 9 q̄ ſ̄ ſub alia ūgla. relīq; q̄ ñ mlt' eoꝝ ꝑlēptl' ñ tō ꝑ 1 7 ꝑ
aītatē q̄ bīt nupti utūlq; latūl ad ūnē. oīo ītaq; d 7 6 18 7 0 9 8 ī 7 alēdit m
7 1 0 7 8 0 7 4 q̄ ꝑāl ſ̄ ſm lat'. Et add' ꝑ aī nūo pōito ſ̄ ꝑmū lat'. ſ. am.
7 7 8 4 4 7 9 6 ei 7 6 8 7 7 4 6 7 0 q̄ duud' oēs nuōs q̄ ſ̄ ſub ūgul' ꝑma latūl. 7 p 7 q
ſ̄ ſub una ugla ſ̄ latūl. h' ē ſcām mltūd aī hūīd nūz ꝑma latūl. vt duudes ea oēs
mptes q̄ ſ̄ ſub ūgul' ſ̄ latūs 7 p 1 7 q̄ ſ̄ ſub una ūgla ꝑmi latūl. h' ē ſ̄ q̄ mltūd
aī hūīd nūm ſ̄ latūl. ḡ duudel ꝑ p 1/2 0 0 0 0 0 0 0 / 4 7 7 8 9 11 12
eabē ꝑ hūi ūglē apmōz 1/2 6 7 9 11 12 7 4 0 pōſita uicīē. quoū ꝑēla p 1 7 ē 7 Alia ēſtio
Si 1/2 11 1/4 4 7 2/3 1/3 ex'tē uolūt d 2/4 0 11 7 7 2 1 1/3 1/8 2/3 repiēs tō ordīē ꝑcēptā
7 7 8 4 4 7 9 6 et 7 4 0 7 8 0 7 4 ēcles minozē ipoz d maiou / remanebunt
7 12 4 7 4 8 7 8 q̄ duudel ſiīt ſ̄ ſcē uīcīoīs rē p 1/2 0 0 0 0 0 0 0 / 6 7 9 10 11 12 eabē
0 7 1 2/3 2/3 10 1/11 1/12 7 8 9 ꝑ reliquo quelibet exēcionīg.

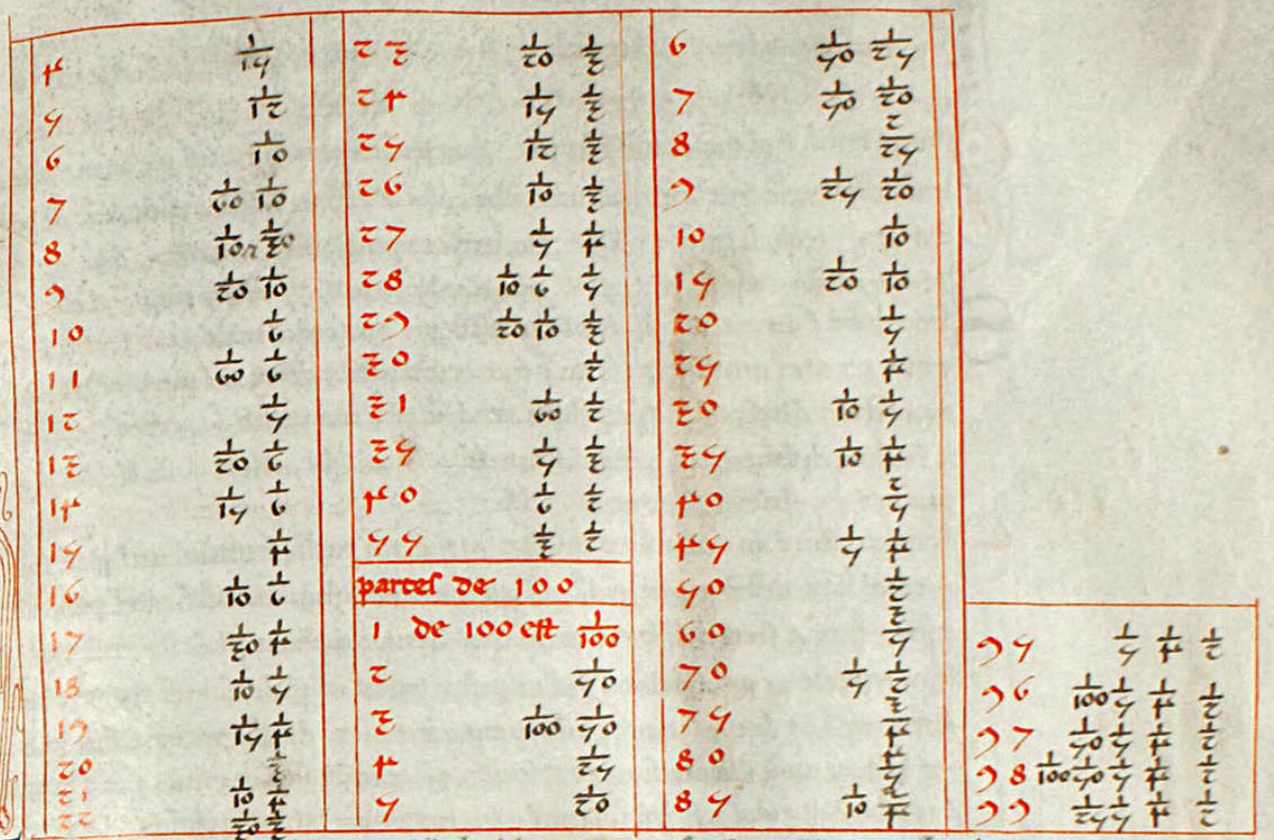
Dmſi pregla 7 8 4 4 7 9 6 duuſil 7 4 0 7 8 0 7 4 lēb' duuſionē maoꝝ pōt
nūi. p minozē ꝑmanū maq; reſoluī ꝑmanū. Duuſ addē 2/4 2/3 aī 2/3 hac eād ūgla
ſmanare ſcēlo ab alia ꝑe. 7 lēb' q̄ ſitū. ſ. 2/4 2/3 q̄ reduḡt ad ꝑtes unī nūi p dict'
nā ſupdictā ei 16/4 4 h' ē 1/4 2/3 Et ſi 2/4 2/3 d 2/3 ēcles nūc. ſit 2/4 2/3 h' ē d 2/3 exēnteq;
2/4 2/3 nūmū 2/4 2/3 remanebīt. h' ē 1/4 4 ut acē 2/3 d 4 4 ei 10 d q̄bz ēcles 2/4 ꝑoz rema
nebīt 4 q̄bz duuſil p 4 4 hūi' ſiliq 4/4 4 ꝑ reliquo dicē exēcionīg. Siliq ſi 2/4 0/6 unḡ
ēcles d 1/6 ēcles 2/4 0/6 d 4/4 0/6 ſ. d 1/6 remanḡ 1/4 0/6 ſlā d q̄aīq; re ēcbūē 2/4 aīd rei rema
nē necē ē. Et ſi ex aliq̄ re ēcbūē 2/4 exeād remanī 2/4 vñ ſi 2/4 4/4 exēnteq; remā ebīt
2/4 4/4 Et ſic ītelligaī d oīb; ſiliīb;. Siliq ſi 4/5 2/5 ugd 2/5 ēclē remanebīt 2/5 2/5 ſ. 22/62
q; d q̄aīq; re ēcbūē 4/5 exeād re 2/5 remanē neceſſe ē aī 4/5 4/5 ēcaūē unū ītegr'

Incipit ſcā ſexta ſeptimū capīli d diſtīctōe pīmū ꝑānū m ſingulis ꝑānbus

Iſt ꝑma ꝑtīcla pre h' capīli duūſozū nūoū ꝑtes ī ꝑtes unī nūi aggregate dcōrū. In
hac ūo plēt ꝑtes unī nūi in ſingla ꝑtes diſtīgate dcōs ut ītelligibilī ꝑcipiaī ūbi
ūglē. q̄ ꝑāl ut' ꝑtes ſint aīl ītegr' cogīcē natāl. Duudīē ē h' op' ī ſeptē diſtīctōīb;
Quaz ꝑma ē q̄n maoz nūl q̄ ē ſub ūgla duuden. p minozē. ſ. pīg q̄ ē ſub ūgula
Cui diffīē ē. ut duudel maoīē p minozē. 7 lēb' ptē q̄ minoz ē d maoz ſ̄bi gīn
uolūī ſcate d 1/12 q̄ ꝑāl ſiīt unī integr' duuſil q̄d 12 p 12 rectē 4 p q̄bz dicaī 1/4 ꝑāl
ꝑāl 2/3 1/12 ex uno integr'. Eūdēq; rē 4/20 ſ̄ 1/4 unī integr' 7/100 ſ̄ 1/20 q 100 duuſil p
4 redūnt 20 d' h' ītelligaī de ſimilib;.

Quidā q̄d h' diffīā ītes ꝑtes. q̄nī ꝑma ē ſiplex, ſm ꝑpōīta. ētia tm ſoluta ꝑpōīta nōiaī
ſiplex ē d' ulla d q̄mō ſcta ītegr'. Cōpōīta ē q̄n ſiplex referī ad ꝑtes alīūl nūi ut 2/4 0/3
referūī ē 2/4 q̄ſ d ꝑma diffīā ſiplex ad ꝑtes d 3 q̄ſ p 4/4 0/3 h'ē 1/2 0/3 ſ. 1/18 7 p 6/3 0/3 h'ē
1/2 0/3 7 p 2/3 0/10 h'ē 1/2 0/10 aī ſim plicīt 2/3 ſiīt 1/2 ꝑpōīte aī 1/10 ei 1/2 0/10 q̄d' ītelligīg
d ſiliīb;. ꝑma tm ſoluta ꝑpōīta q̄ 2/4 0/3 aī ſiīt ea ad 2/3 0/4 q̄ q 1/2 0/4 ſiīt ītelligīg d 4/7 0/8
q̄ tm ſoluūī ī 4/8 0/7 ſ. aī 1/2 0/7 7 p 2/3 0/10 h'ūī 7/10 0/3 ſ. 1/2 0/3 De ſcā differēcia

Scda diffñ ē qñ maior nūl ñ diuidr ꝑ minorē. ſz d minor poſſit ſiēn tot̄ ꝑtes q ꝑ quālibz ipāz maior diuidr aī diffē regl̄ē ut d minor faciaſ ptes ꝑtes maior diuidi poſſit. ⁊ diuidaſ maior ꝑtib⁹ quāq ipāz ꝑtiū. ⁊ hēb ſinglas ꝑtes q minor fuit ecmaiore. Vbi grā. uolum⁹ diſgregare $\frac{7}{6}$ in ſinglas ptes unī in tegr. q 6 ñ diuidit ꝑ 4 negaē $\frac{7}{6}$ ee ꝑma ēe diffñ. ſz q 4 diuidit in duas ptes. ſ. ī $\frac{7}{12}$ ⁊ ꝑ quālibz quaz maior. ſ. 6 diuidi affirmaē $\frac{7}{6}$ d ſm ēe diffiā. Vñ diuiſi. 6 ꝑ $\frac{7}{12}$ reſtit ⁊ ee $\frac{7}{12}$ ꝑ qbz ⁊ accipit $\frac{1}{12}$ q ꝑ $\frac{7}{12}$ aēo $\frac{7}{12}$ ḡ $\frac{7}{6}$ ſūt $\frac{1}{12}$ unī integr. ut alr diſgregaſ $\frac{7}{6}$ in $\frac{7}{12}$ ⁊ $\frac{7}{12}$ eīr una q̄q illaz duaz ꝯglaz. d ꝑma diffiā. ſ. $\frac{7}{12}$ ſit $\frac{1}{12}$ ⁊ ee $\frac{7}{12}$ uī $\frac{7}{12}$ ſit $\frac{1}{12}$ ſ ſ ſ



4	$\frac{1}{14}$	23	$\frac{1}{20}$	$\frac{1}{2}$	6	$\frac{1}{50}$	$\frac{1}{25}$	
5	$\frac{1}{12}$	24	$\frac{1}{15}$	$\frac{1}{2}$	7	$\frac{1}{50}$	$\frac{1}{20}$	
6	$\frac{1}{10}$	25	$\frac{1}{12}$	$\frac{1}{2}$	8		$\frac{2}{25}$	
7	$\frac{1}{60}$ $\frac{1}{10}$	26	$\frac{1}{10}$	$\frac{1}{2}$	9	$\frac{1}{25}$	$\frac{1}{20}$	
8	$\frac{1}{10}$ $\frac{1}{20}$	27	$\frac{1}{5}$	$\frac{1}{4}$	10		$\frac{1}{10}$	
9	$\frac{1}{20}$ $\frac{1}{10}$	28	$\frac{1}{10}$ $\frac{1}{6}$	$\frac{1}{5}$	15	$\frac{1}{20}$	$\frac{1}{10}$	
10	$\frac{1}{6}$	29	$\frac{1}{20}$ $\frac{1}{10}$	$\frac{1}{2}$	20		$\frac{1}{5}$	
11	$\frac{1}{60}$ $\frac{1}{6}$	30		$\frac{1}{2}$	25		$\frac{1}{4}$	
12	$\frac{1}{5}$	31	$\frac{1}{60}$	$\frac{1}{2}$	30	$\frac{1}{10}$	$\frac{1}{5}$	
13	$\frac{1}{20}$ $\frac{1}{6}$	35	$\frac{1}{5}$	$\frac{1}{2}$	35	$\frac{1}{10}$	$\frac{1}{4}$	
14	$\frac{1}{15}$ $\frac{1}{6}$	40	$\frac{1}{6}$	$\frac{1}{2}$	40		$\frac{2}{5}$	
15	$\frac{1}{4}$	55	$\frac{1}{2}$	$\frac{1}{2}$	45	$\frac{1}{5}$	$\frac{1}{4}$	
16	$\frac{1}{10}$ $\frac{1}{6}$	partes de 100			50		$\frac{1}{2}$	
17	$\frac{1}{20}$ $\frac{1}{4}$	1 de 100 est		$\frac{1}{100}$	60		$\frac{3}{5}$	
18	$\frac{1}{10}$ $\frac{1}{5}$	2		$\frac{1}{50}$	70	$\frac{1}{5}$	$\frac{1}{2}$	
19	$\frac{1}{15}$ $\frac{1}{4}$	3	$\frac{1}{100}$	$\frac{1}{50}$	75		$\frac{3}{4}$	
20	$\frac{1}{2}$	4		$\frac{1}{25}$	80		$\frac{4}{5}$	
21	$\frac{1}{10}$ $\frac{1}{4}$	5		$\frac{1}{20}$	85	$\frac{1}{10}$	$\frac{3}{4}$	
22	$\frac{1}{20}$ $\frac{1}{2}$							

95		$\frac{1}{5}$	$\frac{1}{4}$	$\frac{1}{2}$
96	$\frac{1}{100}$	$\frac{1}{5}$	$\frac{1}{4}$	$\frac{1}{2}$
97	$\frac{1}{50}$	$\frac{1}{5}$	$\frac{1}{4}$	$\frac{1}{2}$
98	$\frac{1}{100}$ $\frac{1}{50}$	$\frac{1}{5}$	$\frac{1}{4}$	$\frac{1}{2}$
99	$\frac{1}{25}$	$\frac{1}{5}$	$\frac{1}{4}$	$\frac{1}{2}$

Tercia differentia disgregationum

Tercia quod differentia est cum uno plus maiori numero dividitur per minorem, cuius differentia regularis est, ut numerus quinque 1 plus maiori dividas per minorem 5 quot ex divisione [illegible] minor de maiori et in se eadem partis partis que 1 est de minori numero. Singularia volumus facere singulares partes de $\frac{2}{11}$ que sunt ex hac differentia cum uno plus de 11 scilicet 12 dividantur per 2 que sunt singularia ex quo dividuntur cum eveniant 6 reducuntur $\frac{1}{6}$ et in sexta parte de 11 scilicet $\frac{1}{6}$ $\frac{0}{11}$ dividantur per singularibus partibus de $\frac{2}{11}$ eadem ratione per $\frac{3}{11}$ habebis quartam et $\frac{1}{4}$ $\frac{0}{11}$ habebis $\frac{1}{44}$ $\frac{1}{4}$ Et per $\frac{4}{11}$ habebis tertiam et $\frac{1}{3}$ $\frac{0}{11}$ habebis $\frac{1}{33}$ $\frac{1}{3}$ et per $\frac{6}{11}$ habebis dimidium et $\frac{1}{2}$ $\frac{0}{11}$ habebis $\frac{1}{22}$ $\frac{1}{2}$ et per $\frac{5}{19}$ habebis $\frac{1}{4}$ $\frac{1}{4}$ $\frac{0}{19}$ habebis $\frac{1}{76}$ $\frac{1}{4}$ cum 5 que sunt sunt 19 sunt $\frac{1}{4}$ de 20 que sunt 1 plus 19 [illegible] et tertia differentia ut $\frac{2}{3}$ $\frac{0}{7}$ que sunt $\frac{1}{2}$ $\frac{0}{7}$ et $\frac{1}{6}$ $\frac{0}{7}$ cum $\frac{2}{3}$ sunt $\frac{1}{6}$ $\frac{1}{2}$ similiter $\frac{4}{7}$ $\frac{0}{9}$ sunt $\frac{1}{2}$ $\frac{0}{9}$ et $\frac{1}{14}$ $\frac{0}{9}$ [illegible] $\frac{4}{7}$ sunt $\frac{1}{14}$ $\frac{1}{2}$ et revolvuntur et habebis eadem differentia ut $\frac{3}{7}$ $\frac{0}{11}$ vel $\frac{3}{7}$ $\frac{0}{8}$ nam $\frac{3}{7}$ $\frac{0}{11}$ sunt $\frac{3}{11}$ $\frac{0}{7}$ que $\frac{3}{11}$ per [illegible] differentiam sunt $\frac{1}{44}$ $\frac{1}{4}$ quare $\frac{3}{11}$ $\frac{0}{7}$ sunt $\frac{1}{4}$ $\frac{0}{7}$ et $\frac{1}{44}$ $\frac{0}{7}$ similiter $\frac{3}{7}$ $\frac{0}{8}$ revolvuntur in $\frac{3}{8}$ $\frac{0}{7}$ que sunt ex duabus differentiis compositis scilicet ex sua et ex tertia. Secundum quod sunt differentiam compositam $\frac{3}{8}$ $\frac{0}{7}$ sunt $\frac{1}{8}$ $\frac{1}{4}$ $\frac{0}{7}$ scilicet $\frac{1}{4}$ $\frac{0}{7}$ et $\frac{1}{8}$ $\frac{0}{7}$ secundum quod tertiam differentiam compositam $\frac{3}{8}$ $\frac{0}{7}$ sunt $\frac{1}{24}$ $\frac{1}{3}$ $\frac{0}{7}$ cum per $\frac{3}{8}$ habentur $\frac{1}{24}$ $\frac{1}{3}$ [illegible] intelligas de similibus.

Sunt enim ex hac eadem differentia quando de minori numero que est sunt singularia possunt fieri **De eodem differentia**

due partes per qualibus quarum uno plus maiori integraliter dividitur ut $\frac{8}{11}$ et $\frac{9}{11}$ [illegible] $\frac{8}{11}$ possunt fieri due partes scilicet $\frac{6}{11}$ et $\frac{2}{11}$ unde per $\frac{6}{11}$ habemus secundum hanc rationem duas singulares partes scilicet $\frac{1}{22}$ $\frac{1}{2}$ et per $\frac{2}{11}$ habemus $\frac{1}{66}$ $\frac{1}{6}$ ergo per $\frac{8}{11}$ habemus $\frac{1}{66}$ $\frac{1}{22}$ $\frac{1}{6}$ $\frac{1}{2}$ similiter per $\frac{9}{11}$ quere solvuntur in $\frac{6}{11}$ et in $\frac{3}{11}$ habemus $\frac{1}{44}$ $\frac{1}{22}$ $\frac{1}{4}$ $\frac{1}{2}$ et per $\frac{10}{11}$ habemus $\frac{1}{33}$ $\frac{1}{22}$ $\frac{1}{3}$ $\frac{1}{2}$ cum 10 que sunt 11 sunt $\frac{1}{3}$ $\frac{1}{2}$ de 12 que 12 sunt uno plus quam 11 que sunt sub singula.

Quarta differentia est quando maior est sine regula et uno plus maiori dividitur **De quarta differentia disgregationis**

per 1 minus minori ut $\frac{5}{11}$ et $\frac{7}{11}$ [illegible] 1 de minori [illegible] facies unam singularem partem unius integri [illegible] quam sunt [illegible] que sub singula et [illegible] remanebunt partes tertie differentie ut sicut $\frac{5}{11}$ [illegible] $\frac{1}{11}$ remanebunt $\frac{4}{11}$ per quas $\frac{4}{11}$ habebis singulares partes per tertiam differentiam

De quinta differencia.

De sexta differencia

De septima differencia

oportet fiat singlaris pres. s. pbr̃e eũd diffñm qr̃ duplꝫ 4/8 p 4 erabit 11 q̃ apl̃a
vñ anglat q̃ 1/12 ē maior singlaris pars q̃ sit 1 7/8 vñ accipiat 1/12 d 7/8 .s. d integ
et 7/8 aq̃bꝫ uꝫ in 7/8 d ē 1/6 0/48 bi ē 1/24 8 q̃ sic hẽb p 17/20 tres singlares prog. s.
1/24 8 1/12 1/2 Regula uniuersal̃ idiscretionē pãnũ nũoꝝ:

Et eũ istis aliis q̃ãi alia uniuersal̃ regla. s. ut iuenias nũm q̃ hãt ise mitral regias
uno 12 ut 24 ut 36 ut 48 ut 60 ut quelibꝫ alii nũm q̃ sit maior medietas numi
erũtẽ sub ãgla. ut minor duplo reps ut p plẽpus 17/20 accipiam 24 q̃ plus me
ditate d 20 q̃ nũ g 17 q̃s sr̃ anglam p 24 er 40 8 q̃ duplꝫ p 20 q̃ p 24 erabũt 2/20 14/24
sit nũd 14 q̃ proxs ẽ d 24 sũt 1/24 ut 1/12 1/2 q̃s sua p partibꝫ d 17/20 q̃ nũd nũoꝝ
3 q̃s sr̃ 20 q̃ prox sũt d 24 sũt 1/12 pmũ p quo hẽb 1/12 0/20 in alid partibꝫ d 17/20 q̃
2/20 d 1/24 aq̃ 2/24 d 1/20 q̃ sũt 1/12 0/20 .s. 1/24 8 ẽ p 17/20 hẽb 1/24 8 1/2 ut 1/24 8 1/12 1/2
ut supius inuenimus.

Item simil̃ 17 q̃ sr̃ 20 p 36 sian mitalis 1/2 p 24 q duplꝫ sũt p 20 q p 36 erabũt
2/20 q 1/24 sũt 1/12 ut 1/12 1/2 d 36 q 3 q̃s sr̃ 20 sũt 1/12 d 36 q aĩ ipã 3 sic sr̃ 20 er 1/12 0/20
hẽ 1/24 8 sic hẽb in p partibꝫ singulanibꝫ d 17/20 1/24 8 1/2 ut 1/24 8 1/12 1/2
Et si uis scire q̃m mitalium p 24 illa 17 q̃s sr̃ 20 q duplum summa p 20 scal nꝫ d 17/20
scalle 1/24 q 24 ē nũl er mitalis nũis q poss̃ uni pres al̃ addi exp̃ma q su diffñ. sr̃ eni
ut ꝓdicta inuenta 2/20 11/24 erq̃bꝫ 11/24 q̃s iampte iuge bint p sũ diffñ 1/24 1/2
ut 2 q p 2/20 0/24 q remanũt bint p p̃ma diffñ reuoluta 2/24 0/20 hẽ 1/12 0/20
Sũt ai mitalis 17 p 36 q duadrilla p 20 rõ d 17/20 scalis tgelimas seruat̃ q ẽ eq̃lꝫ
ai 2/20 qr quã positiõ hñt 20 ad 36 eadẽ ꝓportiõ hẽbt 17 ad quã uni nũm quare
mitiam tui nũm .s. 17 p 8 m. s. p 36 q duplum summa p p̃mũ. q ai. nũi nũi sunt
proportionales ẽ mitalis 8 .s. ipsius eq̃ mitis p̃mu unq̃q; ut ab eucluds d mõstratũ 6.

Item si in singlaris pres diligere uis quã uis sunt ereq̃ata diffñ
ai uno plus d 72 duadrat̃ p uno min d 19 uñ p 19/72 hẽb 1/36 1/72 1/2 m̃ qualit̃ p sepiã
regla si debeat ostendam duplo ẽ d 72 in 19 cadit m̃ 72 q qr̃ hẽbt 1/2 p maior
singlam pre q d 19/72 accipi pot q ecle tui d 72 .s. 72/19 d 19 remanebit 1/2 1 bẽ 1/2 1/72 5
singlaris pres d 19/72 sr̃ 1/36 1/72 1/2 ut p regl̃am quarte diffñ inuenim.

Per hãc ẽ regl̃am ñ possũt in leuit̃ fiãt singlares pres d 20/72 vñ inuenies exp p
alia regla uidel mitalio 20 paluq̃ nũm q mitalis hãt regulas ut scirem mitis
q d 20 p 36 q duplꝫ p 72 q p 48 reliqũ 6/72 18/48 q 18 sũt 1/8 1/24 d 48 ut 1/24 1/2 er 6
q q̃s sr̃ 72 sũt 1/8 d 48 qr̃ er 1/8 0/72 ai ipã 6 sit sr̃ 72 g̃ p singlaribꝫ pribꝫ d 20/72 huius
1/6 0/72 8 1/24 ut 1/8 0/72 1/24 1/2 q sic studeas in ẽibꝫ silibꝫ opus q ai ñ possis punc exp
ali regul̃ ogeual singlares pres q̃libꝫ scitu hic studeas eas paluq̃ aliaq; inuenire
et notandũ q sit multiplex q aptãdi q ai quã dilig̃ter in singlares pres. s. ai maio
nũl ñ duadrat̃ p minore q sit ad minore aliquã eoꝝ regla ut 5/5 qui uni q̃libꝫ nas
integrali p 2 duadr qr duadrat̃ utriusq; eoꝝ p 2 erabit 2 sr̃ ãgli q 2 sub qua hẽ 2/2 q̃s
exta diffñ ai uno plus d 1/2 duadrat̃ p 2 qr̃ sit 1/6 1/2 sũt ẽ 8/8 quoꝝ uniꝰ utriq; duadr
p 2 vñ reliquit̃ in 2/12 q sit 1/24 1/2 p sum diffñm. q sic intelligas d silibꝫ. Et si plꝰ

q̄ sē sē 3 p 2. et ad̄ 1. p̄m̄
et sic hēm̄ 7 et m̄ltr̄ 2

Jnupta fuit sub una ugla oportuit ut reduc̄ret̄ i uno rupto sub ugla ut $\frac{1}{2}\frac{2}{3}$ q̄s $\frac{7}{16}$ Et re-
duc̄ret̄ sic nūc $\frac{2}{2}\frac{8}{4}$ q̄s fuit sub ugla fuit 16 q̄ 16 p̄m̄ sub ugla. 7 sē ip̄a p̄m̄ 7
Te $\frac{2}{2}\frac{2}{4}\frac{5}{5}$ sē $\frac{7}{1}\frac{1}{2}\frac{1}{4}$ q̄ in se ip̄m̄ multr̄ reduc̄. s. m̄ltr̄ 4 q̄s sē 3 p 4 7 addēdo 2 q̄ p̄ 2 7 ad-
dēdo 2 sic hēm̄ 7 1 sē ugla 7 remāēt $\frac{1}{2}\frac{2}{4}$ q in 3 hēm̄ $\frac{1}{2}\frac{2}{4}$ sub ugla q $\frac{7}{1}\frac{1}{2}\frac{1}{4}$ Secdm̄ sep
am̄ regulam diligenter in $\frac{1}{2}\frac{2}{7}\frac{0}{0}$ $\frac{1}{2}\frac{2}{4}$ $\frac{1}{2}$.

Et notādū q̄ in p̄lepta ordīe p̄ēo accepit q̄ minor nūl fuit d̄ maiori. 7 relīq; fe-
clarū poss̄ q̄ remāēre min̄ q̄ā pulcr̄ cuiūlē relīq; ip̄am maiorē p̄ēo 7 oīb; p̄alis
lēgīs p̄ēo q̄ minor sit ea ue sīmaior p̄ fuit $\frac{1}{4}$ oīabus ei secū. 7 si fuit $\frac{1}{4}$ oīabus
ei $\frac{1}{8}$ Abeg̃o i $\frac{1}{4}\frac{5}{5}$ maiorē $\frac{1}{12}$ q̄ erāt d $\frac{1}{4}\frac{5}{5}$ remanēt $\frac{3}{12}$ i. $\frac{3}{6}\frac{0}{2}\frac{0}{7}$ q̄ p q̄ātū
dupl̄ d $\frac{1}{2}\frac{0}{3}\frac{0}{2}\frac{0}{7}$ $\frac{2}{4}\frac{0}{5}$ $\frac{8}{4}\frac{0}{5}$ hēm̄ $\frac{2}{4}\frac{0}{5}$ $\frac{6}{2}\frac{0}{7}$ $\frac{2}{4}\frac{0}{5}$ $\frac{1}{12}$ q̄ min̄ q̄ā pulcr̄ fuit. sēr relīq;
$\frac{1}{12}$ a quor ei $\frac{1}{4}$ q̄ erāt d $\frac{1}{4}\frac{5}{5}$ remanēt $\frac{1}{2}\frac{0}{4}\frac{0}{5}$ hēm̄ $\frac{3}{8}$ 7 sic p $\frac{1}{4}\frac{5}{5}$ hēm̄ $\frac{3}{8}$ $\frac{1}{4}$ q̄ p̄ūs pul
dupl̄ p̄ sic p̄ūb; 7 reputīs ab o. 6 ut dupl̄ $\frac{1}{4}$ q̄s sē $\frac{1}{4}$ 7 p̄ceptis d $\frac{1}{4}$ 7 exibit $\frac{4}{5}\frac{0}{7}$ q̄ p
sūt opēo a dīctis sē $\frac{1}{4}\frac{0}{7}$ nā $\frac{4}{5}\frac{0}{7}$ 6 $\frac{1}{4}$ et $\frac{1}{4}\frac{0}{7}$ 6 $\frac{3}{8}$ 6 hoc p $\frac{1}{4}\frac{5}{5}$ hēm̄ simlīr $\frac{1}{2}$

Jncipit capitulum octauum de reprehensis p̄cēs inan̄ p maiorē gulam

Sicōb; nrōs negocior̄ōb; q̄tuor nūc p̄mūlgāt, sēp reprēh̄. ex q̄b; nrōs g̃ non
ib 7 ignōs. p̄t q̄ dicūt ēt notor nūlam 7 nūc uicior̄ calūb; nrōs suos q̄ue
mū sui p̄ēo sue dilectos. Alīs d̄ uic capāl cura ut ēsū hoīnē. 7 filiū. p̄mūt
ē uic nō. ut ēsū. ut hoīe. aut unē. 7 filiū. ō sūma q̄ uic mēt dic. Secūda
cura cauēe p̄cepta 7 filiū. 6 ōīm aūt p̄cēp̄ uicior̄ nūl. b ē nūl p̄m̄ū.
sui sēr q̄ntū q̄ūlīb; dīcūt sui hōātor sue nrōr. ut alcūl dic aūsus
mōre. Ecūl uōl q̄ ei aliq̄ cūt uēdue ēcūl ānūalē p̄cūl. b q̄dāq;
nūl gūl. 7 q̄ ei aliq̄ filiā q̄ūcūl sīl p̄cūl. aut nēc. b q̄cūl ūgē nūl uīr ūgūl
ē ut ūnos nūl p̄cēp̄ reputāt. uic nōīb; ēdūc reglīs unūsqīsq; ut ē ūnapte
uīle. Jndecēt p̄cēp̄ ēdūc ūnū. 6 uic. Reuā ēcūl unēa p̄cūl p̄cūl ip̄l ēcūl nūl
ūn nūm. Tcūl q̄ ei aliq̄ filiā mēt. ēcūl sub uic. 6. sub p̄mo. 7 si fuīt p̄cūl sēc aq
sub p̄cēp̄ uic sub p̄cēp̄ Jn ōīb; hīs regūl q̄ sub q̄ sēbāt. Jeū ēt sīl p̄cēp̄ūm
q̄ ei ūnū. uic ūnū. ēt uic. b 6 sīl p̄cēp̄ nūl sub q̄ sēbāt. b si ūnūs nūl
fuit nūl p̄cēp̄ q̄ uic ūnū. ēcūl ūnū. sūcaq; uīcaq; si ūnūs ūnūq; ūnūl. Et
ūnūl nūl ūnūl. q̄ uic ūnū. sēr ūnū. sēr ūnū. 6 ūnū. ūnū. si ūnūs ūnūl. Et sīl ūnūs
ūnūs ūnū. ūnū. ūnū.

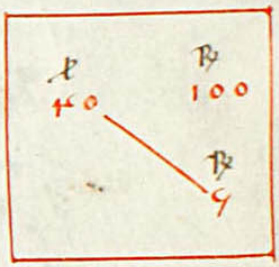
intus numerum diuisionis numeri in quo peruenit. Similiter si tertia quantitas ignoratur diuidenda est per tertiam
multiplicatio prime in quartam et ut ea que ad negotiationes pertinent perfecte in hoc libro habentur hoc capitulum
in quattuor partes diuidimus. quarum prima erit in uenditione canonum et earum rerum que ad pondus uel numerum
uenduntur. Secunda in eis que ad coloneum seu ad cabium pertinent ut solidus libra uel marca argenti
uel auri et similia. Tertia in uenditione canarum. ballarum. torscelli et similium. Quarta pars erit
in reductione rotulorum unius cantaris ad rotulos cuiuslibet alterius cantarum secundum eius diuersitatem.

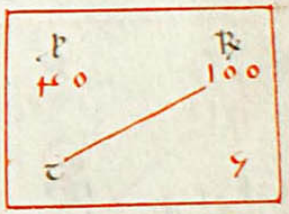
Cantar autem piscium habet in se centum **De cantare pisces cum queritur pretium de rotulis pars prima**
partes quarum una quaque uocatur rotulus et rotulus habet uncias 12 quarum una quaque predicatur dicitur
$\frac{1}{2}$ 39 de cantar et dicitur est carrube 6 et carruba est genera quattuor frumenti. Quod cantar
si uenditur pro libris xl et queritur quantum ualeant rotuli 5 quia tres noti numeri proponuntur
in hac positione sicut supra necesse fore prediximus scilicet rotulus 100 et libra 40 et rotulus 5 quorum duo sunt unius generis scilicet
rotulus 100 et rotulus 5 que 100 sunt merces. Alter uero scilicet 40 est alterius generis scilicet pretii et est pretium dictorum
100 rotulorum. queritur ut prediximus. describatur rotulus 100 et libra 40 in una linea recte uidelicet scribendo
rotulus 5 scribatur sub rotulo 100 ut hoc supra ostenditur. et erit duo numeri unius generis unus sub alio ut predi-
ximus scilicet rotulus 5 sub rotulo 100 tunc ipsis ita descriptis multiplicatis numeris qui sunt ex aduerso scilicet 5 per 40 erit 200
que diuidit per 100 exibit libra 2 pro pretio illorum 5 rotulorum que describuntur sub 40 quia ille numeri qui ex diuisione
peruenit semper est ex genere illius solius numeri qui est in tribus dictis numeris unum manifestum est quod ex quattuor
numeris qui ponuntur in mercationibus duo illorum sunt merces et duo illorum sunt pretia et sunt ita proportionales
quia sicut 100 scilicet merces est ad suum pretium scilicet ad 40 ita 5 scilicet merces erit ad suum pretium scilicet ad 2 Nam
100 ad 40 sunt quinque medietates eorum similiter et 5 ad 2 sunt quinque medietates eorum. Item sicut
40 scilicet pretium est ad 100 scilicet ad suam mercem ita 2 erit ad suam mercem scilicet ad 5 nam 40 sunt duo quinque
de 100 et 2 sunt duo $\frac{0}{5}$ de 5 permutatim quoque sicut merces est ad mercem scilicet 5 ad 100 que sunt eius $\frac{1}{20}$
ita pretium est ad pretium scilicet 2 ad 40 ut sicut 100 sunt ad 5 que sunt in capitulo eorum ita 40 sunt ad 2 et per
istas proportiones potius ex arbitrio colligere. si quantitas numeri ignoti recte inuenta fuerit per ut dictum
ostendimus suo loco. **De eodem cum queritur merces de libris**

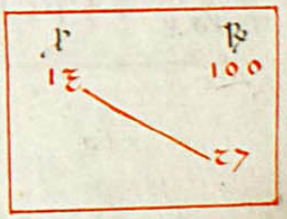
Item rotulus 100 per libras 40 quot rotulus habet per libras 2 quia in his tribus numeris duo sunt ex genere pretii scilicet libre 40
et libra 2 et alter est ex genere mercis describatur 40 et 100 in una linea ideo quia dicitur rotulus 100 per libras 40
de uno libro 2 describatur sub libra 40 et erit numeri eiusdem generis unus sub alio ut in hac sua descriptione
cernitur. et multiplicatis numeris qui sunt ex aduerso scilicet 100 per 2 erit 200 que diuidit per 40 exibit rotulus 5 pro merce illarum
2 librarum quos describe sub rotulo 100 **De eodem cum queritur pretium de rotulis**

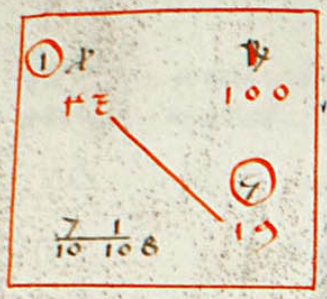
Item cantar uenditur pro libris 13 quantum ualet rotulus 27 describatur numeri ut prediximus scilicet rotulus 100 et libra 13
in una linea et rotulus 27 sub 100 multiplicetur numeri existentes ex aduerso scilicet 13 per 27 erit 351 que diuidit per
100 scilicet per $\frac{1}{10}$ $\frac{0}{10}$ exibit $\frac{1}{10}$ $\frac{5}{10}$ 3 que describe sub libris 13 ut in hac alia patet descriptione. Nam si de
$\frac{1}{10}$ $\frac{5}{10}$ scire uolumus que partes sunt unius libre. multiplicatis 5 que sunt 10 per alia 10 et de sunt addit 1 erit 51 que
multiplicata per summam dictorum unius libre scilicet per 240 erit 12240 que diuidit per $\frac{1}{10}$ $\frac{0}{10}$ exibit dicitur $\frac{0}{10}$ $\frac{4}{10}$ 122 que sunt solidi
10 et dicitur $\frac{2}{5}$ 2 Alter duplicatur 5 que sunt 10 erit 10 que sunt solidi. Item duplicatur 1 que est sicut alia 10 erit 2 que
habentur pro diuisis cum totidem quantis. Sed hoc igitur manifestum est quod uel una quaque libra dictorum que diuisa fuerit per
100 peruenit dicitur $\frac{2}{5}$ 2 et de omni decimo librarum scilicet 2 et de singulis 5 peruenit scilicet 1 **De eodem**

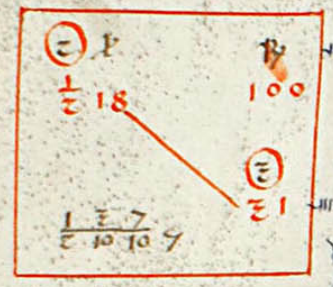
Item scilicet rotulus 100 uenditur pro libris 43 et quantum ualeant rotuli 19 describatur ipsis secundum prescriptam doctrinam

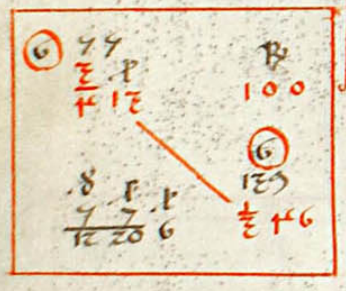










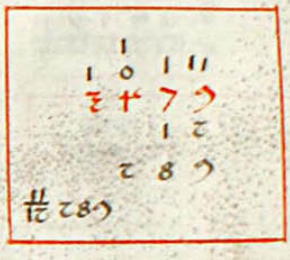


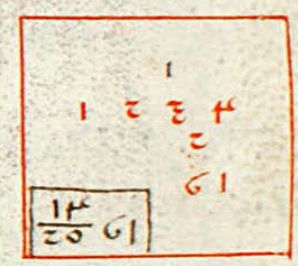
mk' nuōs q̄ sī eccl'a vīso. s. 19 p 1½ cī 8 17 q̄ duuīs p 1/10 0/10 eccl'ē. l' 7/10 1/10 8 q̄s pē-sb'
lib'ş 1½ sl'ā ō 7/10 1/10 q̄ p̄tūş ş uīs lib' ita ut p̄dixim' cognoscat'. Videl'ic' duplicş uīs
q̄ē sī 10 cī s. z Jtē duplicab' 7 q̄ş sī alia 10 cī dī 1½ aī tot tūdē q̄ntus q̄b; uīcūs aī. p.
z q̄s mō b'uīm' cī s. z 7 dī 1/2 1½ 7 tō ual' p'. 19 exig' d' lib'ş 8 possūm' ē cert' 7 p'
t'agē ut accipiāt' 4 cetp'ş 7 q̄b; retineat. s. 1 quē adde aī. s. z iuenat. cī s. z
Reliduū itaq; q̄ēa 4 usq; ī 7 duplica cī dr 1½ aī tot tūdē q̄ntus ut ō mutēt sint.
Tem. 1x. 100 ual' lib' 1/2 18 q̄ntū ualz g̃ 1x z 1 dēpt's itaq; nūs pordne D'eodē
mk' 18 p z q̄ sī sub ugla p' ip̄ū. 7 adde 1 q̄ē sī z cī z 7 q̄ pē sī 1/2 18 7 mk' ea p z 1 q̄ uīs
eccl'a vīso cī 11½ 7 q̄ duuīs p 100 7 p z q̄ş sub ugla v' 18 hē p 1/2 0/10 0/10 eccl'a unc' lib'
1/2 7/10 7/10 4 p p'tio quesit' totum 1x. z 1

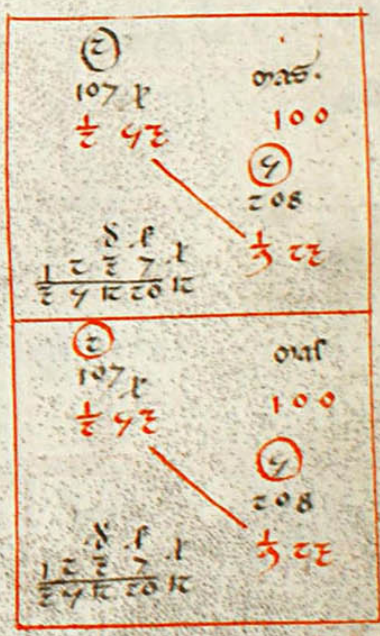
Quod si tecte ostens' ita p p̄la d' 7 cognosc' uidel'ic' duudas' 18 p 7 remanz 1½ q̄ mk'
p z 7 dī sī add' 1 p uno q̄ē sī ip̄ū z cī 3 q̄ duuīs p 7 remanz z p p̄la d' z 7 Jtē ac' p̄la
d' z 1 p septenariū q̄ē z 7 mk' ea p p̄la q̄ m' uicīa' d' z 7. s. p z cī 6 q̄ sūcē p p̄la pēu
totulo z 1 d' ñ mk' 4 p p̄la d' 10 q̄ş p ip̄ū in ugla. s. p z 7 dī sī add' p̄la d' 7 q̄ş sī ip̄ū
10. s. 0 cī 14 q̄ duuīs p 7 remanz 1 q̄ mk' p p̄la seq̄nt' 10 in ugla. s. p z 7 dī sī add'
z q̄ sī sī 10 cī 6 q̄ntū a p z q̄ş sub eād ugla. 7 dī sup add' 1 q̄ē sī z cī 17 d' q̄b; tolle
7 remanz 6 ux p p̄la fuata fr'. Nam sic 1/2 7/10 7/10 q̄ p̄tē sit unū lib' eq̄lē uolūş.
mk' 7 q̄ş sī 10 p alia 10 7 dī sī add' z q̄ş sī ip̄ū 10 q̄ mk' a p z d' ugla 7 add' 1 q̄ē sī z
cī 11½ 7 q̄ mk' p z 10. s. p nūm dēoz unū lib' cī z 7 z 8 0 q̄ duuīs p 1/2 0/10 38 q̄
aī ip̄o nūo sit zeph. in ip̄i p̄mo gēn dnudat' p̄mū p 1/10 hē tollat' in ip̄m zeph'
remanz 7 z 8 q̄ duuīs p 1/2 0/10 eccl'ē d' 1/10 176 q̄ sūt s. 1½ 7 dr 7/4 8 D'cēt aīq;
Vrsul si cert' p'ps q̄ pontāt' lib' 100 subtaleş q̄z una q̄q; ē uē 12 7 precium d' lib'
q̄dub; uē. pondāt' dēos 7 d' aīem. 7 lib' 1/2 8 cert' p̄s facut' cam' 1 hē z 100 p'ls
uedāt' p lib'. 7/12 12 7 q̄nt' q̄ntū ual' lib' 1/2 1½ 6 debāt' mū ut p̄dixim'. s. lib' 100 u
una linea cēt' lib' 7/12 12 7. l'. 1/2 1½ 6 sub. l'. 100. s. inēqs subnūce. ut sup' in p̄cedēt'
fecim'. 7 mk' nuēş q̄ş eccl'a vīso. s. 7/12 12 aī 1/2 1½ 6 7 duuīs p 100 hē mk' 12 p 1½ 7 dī sī
add' z q̄ş sī 1½ cī 44 q̄ pēş sī 7/12 12 Jtē mk' 1½ 6 p z 7 add' 1 cī 12 3 q̄ pē sī 1/2 1½ 6 7
mk' 44 p 12 3 cī 7 61½ 4 q̄ duuīs p 100 7 p z q̄ sī sub ugla d' 1½ 6 7 p 1½ q̄ sī sub ugla
d' 12 hē p 1/2 0/6 0/10 0/10 7 sūma q̄ excūt erit p'mū illaz lib' z 1/2 1½ 6 sz aī d' fractiōib;
q̄ uelūt sī ugā ni possūm eq̄lē q̄ p'sūt' p̄cl' sit unū lib'. donec mlteam mūm
ugē p dēos. lib'. s. p z 1½ 0 ō alī fractōş ugle duplioş. s. 1/2 0/6 0/10 0/10 cauptāt' ş. m
cel. d' 100 mq; duuplo pueuit. faciam 1/4 0/20 q; illd ita hē q 1/10 0/10 7 d' 1/2 7 d' 1/4 p'cipi
faciam tō 1/2 z 7 pōat' mima ugla sic 1/4 0/12 0/20 q ita hē q 1/2 0/6 0/10 0/10 mq; 1/4 0/12 0/20
duuīs 7 61½ 4 cr q̄ sī 20 remanebit cī sol. tō q; lib' dēoz ē sol' 20 7 q̄ sī 12 eccl'a uinc'
cī dī. Jdō q; solo ē dr 12 7 q̄ sī relaq; fractiōş remanebit preş tō unū dī affirmab'
q̄r si 7 61½ 4 p 1/4 0/12 0/20 duuīs eccl'ē l. 0/4 7/12 7/20 6 p p̄dicta lib' z de 1/2 1½ 6
q̄ tō ē q̄ntū si nōīa aī dicerz lib' 6 q. l. 7 dr 4 Nam si ex nūs mq; duuplo pueuit
1/12 0/20 aptari nō possūt. q̄ē tē ti debeat in seq̄nt'b; q̄dā declarabim'. ş qualit' m
12 q 1 20 ş nuī leuē duudāt' ostēdē poterim'. p 12 ē ş nuī duuīs possūt'

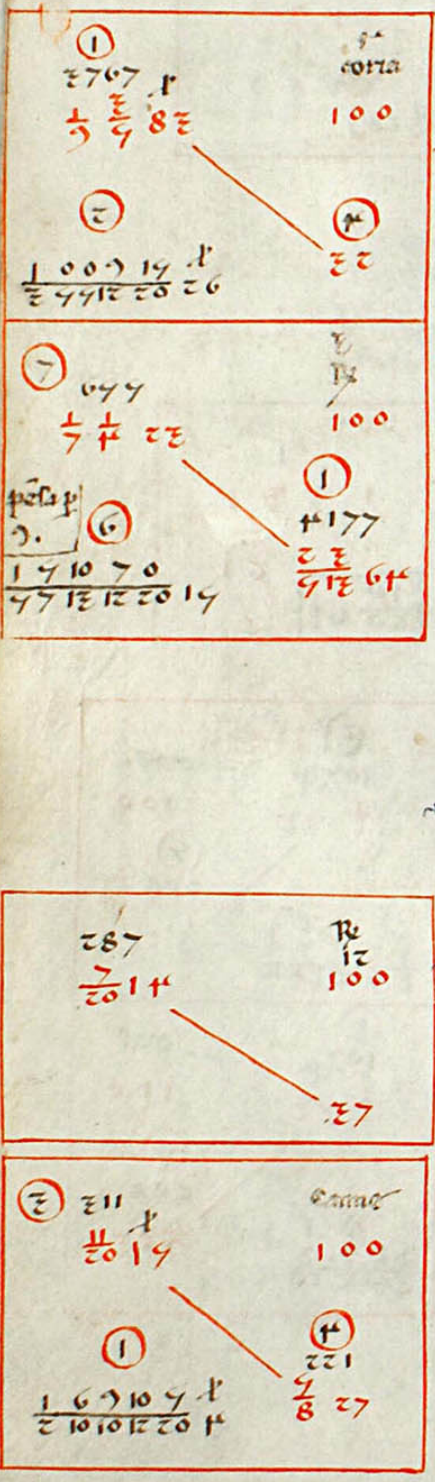
ordine cod' quo nuiꝰ ymuiꝰ q' st' abmazo usq; inouenazu duuđ' dcaum'. Vū
aulcđ' ꝯ quozdā muiozt duntiꝰ tē m1t ut d1t duntī sim1t rectit1 d2t
puenuīt d2t6 puenuīt d1t8 puenuīt d60 pueñ d7t puenuīt d81t p
ueñ d96 pueñ d108 pueñ ut malnit' duntionū ꝺ tinet'. Qđ aū đ quolib;
nuiō a1to infra sī quelib; rtoz supnuīt ē illud q' uolem' in duntiōib; nuiōz sc̄de
sī illū nuīm đ quo supnuīt. ⁊ coplare eī aī añcedēte figā q' stat inuiō duntedi.
Vbi gīū si uolūm' duntē 2t7 ⁊ p1t dedāc1t sub7 đ 2t7 ⁊ acepiat' xl
đ2t q đt ⁊ remanī10 ab ē supstuū q' ē a1t usq; i2t ⁊ pē t sub1 đ2t 910
sī acd 2t aī q; copla 7 bc añcedēte figaz et107 q' duuđ p1t eabt8 ⁊ remanī
11 bē diffiā q' ē a96 usq; i107 pēz gt8 sub7911 sī107 udel1 sī091 sī 7⁊ coplab
ipm11 aī ⁊ eis añcedētib; et11 ⁊ q' duuđ p1t pueīet ⁊ remanī11 pāz ⁊ sub ⁊
911 i q' aī alia pte sī1t ⁊ bēb p q'lum duntiē 12t89 ut in luc đ sept'ē ēnt'. Qđ
manifestū ē đ q' dū 2t7 ⁊ st' sol't89 ⁊ đ11 q; aī aliq' suma ternoz duuđ p1t
tē ecepā duntiē pueīt. s. ē sub' q' de duntiē đ1t ducaz ē do studio tabula
scdo firmauīt eu cordeter in manib; ea leuissime potūt opari. Duntio nuioz p 20
st20 eū ol nuiol sic duuđ' possum' relinq; figā p'm gdus ipi nuī q' duuđ' nul
⁊ sub scīpnū. b ē sub figa fi gdus e đ nuī pāt t q; duuđ' totū tuīz usq; ad pi
figā sub q' ponaz t ⁊ q' ecduntiē ecetūt eāt 20 totī nuī q' duuđ' uolūt. ⁊ fiab
q; supstuīt copla aī aī figā p'm gdus quā relinq're ultim'. ⁊ q' excoplatione erit
est b q' đ st' duntiē remanēt. ⁊ si sī st' figā nudb supstuīt eāt tē reliduū p'm
figa tōn. Vbi gīū siuolūm' duuđ' 12t1 p20 relinq'nt ⁊ q; in p'mo gdu. ⁊ sub
scīpnū figā. s. sub t ponāt t in q; duntiē 12t1 q' remanī đ12t1 exāt sīm ⁊ gdb
61 ⁊ remanī ⁊ q' copla aī ⁊ facuīt 1⁊ gt uenit61 ⁊ remanī11 ecduntiē de
12t1 i20 ut b' ostēdat. et b ē manifestū ē q' s. 12t1 sī' tūb 61 q' sol'11 ●
stēs simaz duntiōib; đ1t ⁊ đ20 ut ū ad pīnū redam'. De cēt maximum q;

Mallamutum 100 ual; tūb 1/2 7z q'nū ual; g' mallamutum 1/2 t2 đ scde muīz pcdīz
ciam dcīz ē supl. ⁊ mlt. nuiōz q; ecaduso udel 1/2 7z p 1/2 t2 ⁊ duuđ p100 b ē mltb
7z p suā ūglaz et 107 q' pē sī 1/2 7z ē nltb t2 p ⁊ đ sī addel 1 et 108 q' pē sī
1/2 t2 ⁊ mlt 107 p 108 et t2t96 q; duuđ p100 ⁊ pz ⁊ p ⁊ q' st' sub ūgl. b ē per-
1 1 0 0 / 2 2 10 10. Et bēb p'm ūlem nuīm mallamutiōz 1/2 t2 ut acep'm nuiōz duntiōiz. ita ut
possit bīe i acp're ūglo 1/2 0/20 ut sint una milīa. ualeat ⁊ solidos ⁊ đ12z ut i p'mo
qōe opus suum' udel. ut đ 1/10 0 faciat 1/4 0/20 ⁊ aī đ reliq' mutuū duntiōiz. s. đ
1/2 ad 1/4 acepīre 1/2 ñ possim' ip đ excal possim' acepe đ pōnēdo đ1t acepam' bē
đ regla ⁊ acepē đ leui 1/2 o cōmisce ipi 1/2 aī 1/2 faciūt 1/2 relinquū duo đ đe nob đ1t
st đ leui' milīe p 2t1 t96 et 1⁊1⁊4 1t q' duuđ p 1/2 0/4 1/2 0/12 0/20 calt 1/2 1/2 7/12 02/20 1t
p suo đ mallamutum 1/2 t2 q; si pluīe p pela đ 7 uoluīz acē pela đ 7z q'ē ⁊ mlt.
ipi p đ ūglaz addi et ⁊ đ q'bz acē pela q'ē t ⁊ tot debz ee pela đ 107 ⁊ ime đ
ui acē pela đ 2t1 q'ē t ⁊ mlta aīp ⁊ đ ūgla ⁊ addi et 1 ⁊ quanū pela. s. 4 ē pela đ
108 q'o mlt p pela 108. s. p t et 10 q' mlt p q' nob mutuē đ đ đ1t udel. p t









27

27 quoꝝ ꝑ̃e $\frac{1}{2}\frac{0}{4}$ qr̃ ꝓplicabm̃ 4 ꝯ ꝑebm̃ 12 mduntice vñ mlcer ñā 6872 1

p 2 q ai ꝓplicar dunsor ꝓplicād ē nūl dundend' er 2061 2 q̄ dunꝺ p 2 q̄tenañ

p ē 8 cetal ndet ñ 4 ꝯ p100 ꝯ p12 ꝯ p20 bē p $\frac{1}{2}\frac{0}{10}\frac{0}{10}\frac{0}{12}\frac{0}{20}$ exbunt bb

$\frac{1}{2}\frac{6}{10}\frac{2}{10}\frac{10}{12}\frac{5}{20}$ 4 quoꝝ ꝑēs pseptenariū ē 1 ut in hac ꝺsēptē cēnt. **Ꝺ cēnt pipis**

Tcen cēnt pipis ualz lib $\frac{2}{20}$ 11 q̄nti ualz ꝑ lib $\frac{1}{4}\frac{5}{12}$ 4 6 bē lib 4 6 ꝯ $\frac{1}{4}$ 4 ꝺsēbe qēz

ꝯ mt' 11 p 2 ꝯ 4 adde ꝯ er 222 2 q̄ pē sr' 11 Jē mt' 4 6 p 12 ꝯ add' 4 q̄p 4 ꝯ adde 1 enunt

222 2 q̄ pē sr' 4 6 ꝯ mt' 222 2 p 222 2 er 4 10 4 4 1 q̄ dunꝺ p 1000 p 20 ꝯ $\frac{1}{4}\frac{0}{12}$ bē p

$\frac{1}{4}\frac{0}{10}\frac{0}{10}\frac{0}{12}\frac{0}{20}$ exbt libre $\frac{1}{4}\frac{0}{10}\frac{1}{10}\frac{5}{12}\frac{0}{20}$ ꝓ p̄to illaz libraz $\frac{1}{4}\frac{5}{12}$ 4 6 q̄ ꝑēs p

Tcēnt ualz lib 12 ꝯ sol' 12 er ꝺr' 4 bē lib $\frac{7}{12}\frac{17}{20}$ 12 q̄nti ualz ꝑ ūc. ¶ septenariū ē 1.

$\frac{1}{3}\frac{2}{4}$ 4 q̄n ualt luc qēe lit' eogñē mast lib 100 ꝯ ūc $\frac{1}{3}\frac{2}{4}$ 4 ñ lit' unt' p̄ꝺt' q 100

lit' lib. $\frac{1}{3}\frac{2}{4}$ 4 sut' ūc. qr̃ ꝺ lib' 100 facīt ꝫ ūc. er 1200 ꝯ ē er ambe li ēl q̄ē ē ab

qō udet' q̄ ūc 1200 ualt' lib $\frac{4}{12}\frac{12}{20}$ 12 q̄ ꝺ ualt' ꝑ ūc $\frac{1}{3}\frac{2}{4}$ 4 quā qēm ut ꝺcm

sēbe ꝯ mlcam 12 p 2 uā ugl'z er dām 2 0 4 1 q̄l p̄ē sr' lib 12 Jē mt' 4 p 2 uat' ugulos

er 211 q̄ p̄ē sr' $\frac{1}{3}\frac{2}{4}$ 4 ꝯ mt' 211 p 2 0 4 1 er 6 4 1 6 4 1 q̄ dunꝺ p 1200 ꝯ p 20 ꝯ

ꝯ p $\frac{1}{12}\frac{0}{20}$ optime i una ugla aptata exbit $\frac{7}{6}\frac{4}{8}\frac{2}{2}\frac{4}{10}\frac{8}{10}\frac{2}{12}\frac{1}{20}$ ꝓ p̄to q

Tumañ unciañ ut in hac ꝺsēptione cēnt. **De cañt**

Tcem cañt ualz lib $\frac{1}{4}\frac{7}{12}\frac{16}{20}$ 2 1 q̄ñt' q̄ñt' ualeāt p. $\frac{1}{7}\frac{2}{4}\frac{7}{12}$ 4 2 bē p 4 2 ꝯ

ūc $\frac{1}{7}\frac{2}{4}$ 7 ob' ꝑ q̄ez ꝺsēpta 2 1 p uā ugl'z er 2 0 ꝯ 4 7 Jē mlcā p 4 2 p 12 ꝯ add'

ꝯ q̄p 7 ꝯ add' 2 q̄p 7 ꝯ add' mlcem ꝺ uno q̄ē sr' 7 ꝯ er 18 2 2 4 q̄ mlt' 2 0 ꝯ 4 7

er 2 8 4 0 16 0 6 8 q̄ dunꝺ p 1000 ꝯ p fiuerioēz q̄ꝫ sub ugul' ꝺcm a unū nūoꝝ op

time ꝺ ap̄tam exbt $\frac{0}{2}\frac{2}{7}\frac{7}{8}\frac{2}{10}\frac{0}{10}\frac{8}{10}\frac{4}{12}\frac{10}{20}$ 2 ut in hac ꝺsēptione ta' auoꝝ

ꝑēs 2 1 ē 7 **De cañt uenditio ꝓ libr' et ꝺr'**

Tcem cañt ualz libr' 12 ꝯ ꝺr' 7 bē lib $\frac{7}{12}\frac{0}{20}$ 12 q̄nti ualz ꝑ cañt 2 ꝯ 4 2 bē ꝯ 4 2

ꝺsēbe qēm ꝯ mt' 12 p 2 0 q̄ 12 ꝯ add' 7 er 2 12 7 q̄ mlt' 2 4 2 er 2 2 2 2 1 9 2

dunꝺ p 100 ꝯ p $\frac{1}{12}\frac{0}{20}$ bē p $\frac{1}{10}\frac{0}{10}\frac{0}{12}\frac{0}{20}$ exbt $\frac{1}{10}\frac{0}{10}\frac{1}{12}\frac{16}{20}$ 9 6 ꝯ 2 4 2

Tcem muiaui uarioꝝ uēdit' ꝓlib' 14 2 ꝯ 4 bē **De muiano uenditio ꝓ libr' et ꝺr'**

ꝓlib $\frac{2}{20}$ 14 2 q̄nti ualt' ꝑ uenat 2 2 7 ꝺsēbe qēm ꝯ mlcā 14 2 p uā ugl'z er 2 0 6 9 q

mt' p 2 2 7 er 6 9 6 6 6 2 q̄ m p 12 ut' tal ea unigla dunt' er 8 2 4 9 9 4 9 q ꝺ

und' p reg'z ꝺ 1000 ꝯ p $\frac{1}{12}$ $\frac{0}{20}$ bē p $\frac{1}{10}\frac{0}{10}\frac{0}{10}\frac{0}{12}\frac{0}{20}$ exbunt lib' $\frac{6}{10}\frac{4}{10}\frac{2}{10}\frac{7}{12}\frac{16}{20}$ 2 4

ꝓ p̄to queliꝫ uarioꝝ. **De eodem ꝓ libr' et sol' et ꝺr'.**

Tcem 2 1000 uēdim' ꝓlib' $\frac{7}{12}\frac{8}{20}$ 4 7 q̄nti ualz ꝑ 2 $\frac{7}{2}$ 8 7 ꝺ septuaginta q̄ mt' 4 7

p uā ugl'z er 1 2 7 8 1 q̄ p̄ē sr' 4 7 Jē mt' 8 7 p 6 ꝯ add' 4 er 4 2 7 q̄ mlt' p 12 7 8 1

er 7 2 6 2 4 8 7 q̄ dunꝺ p 1000 ꝯ p fiuerioēz reliquoꝝ nūeꝝ bē p $\frac{1}{6}\frac{0}{10}\frac{0}{10}\frac{0}{10}\frac{0}{12}\frac{0}{20}$

exbit lib' $\frac{1}{6}\frac{1}{10}\frac{2}{10}\frac{4}{10}\frac{10}{12}\frac{0}{20}$ 4 **Ꝺe eodem. De pondē calci piano**

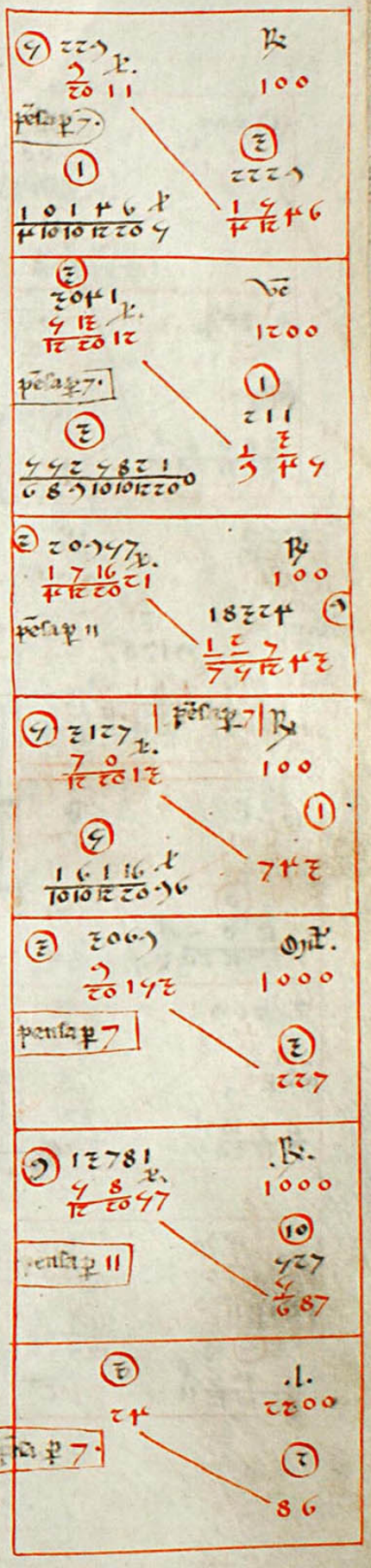
Pond' calci ꝺ p̄ciar cēnt' 2 2 bē lib' 2 2 0 0 uenditi p 2 4 ꝯ

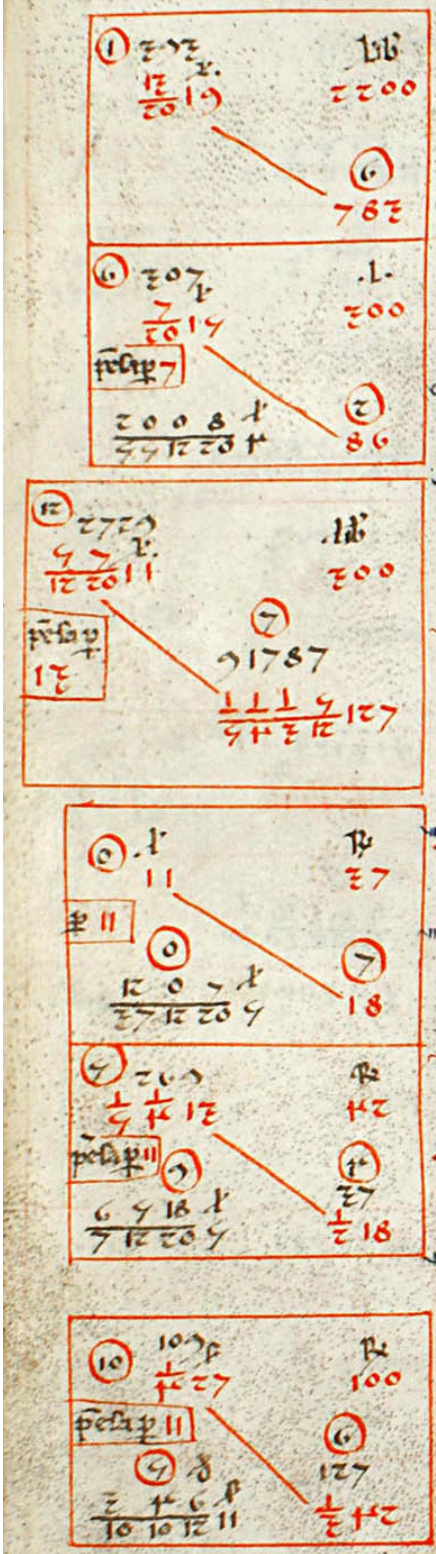
8 6 ꝺsēbe qēm p ꝯ mlcam 2 4 p 8 6 er 2 0 6 4 q̄ dunꝺ p reg'z 2 2 0 0 bē p $\frac{1}{2}\frac{0}{10}\frac{0}{10}\frac{0}{11}$ ñ

fiet $\frac{1}{2}\frac{0}{20}$ $\frac{1}{2}\frac{0}{10}$ ut' liam' q̄z mutigla sic $\frac{1}{10}\frac{0}{11}\frac{0}{20}$ cai ñ liam' 12 mlto mai ꝯ

mlcer 2 0 6 4 p 12 ꝯ migrat' 12 sub ugla ꝺunsoil. Qua ai ardet' 12 sub ugla ꝺun

sioil. ē mlcat' ꝺunsar p 12 Qr̃ mlcam' ē sili' ꝺundedul ūl p 12 ut' ꝓpto ꝺmuedo





Iad duntone fiat eadē q̄ erat p̄us exhibit 8 1 2 18 De eodem
Tem pondus casei habēt lib z 00 valet lib 11 18 q̄ntū valet g̃ lib 100 huic aū q̄em n̄ in
digz scīe ī q; 100 ē ½ d z 00 q̄r ī undigz aliud n̄ ut duidat dictū p̄tū pondus
p regla d z 0 habēt ½ 0 11 q̄ sic fiet pondus acc ½ d lib 18 q k 11 et lib 7 ½ 4 d q̄bz fuc
sol et sol 18 4 d r 6 q̄l duid p 11 exhibit 16 4 remanēt 1 4 d r 6 ad duidendū 11
d q̄bz fuc dīz et dr 11 quoz duid p 11 exhibet dr 11 10 4 rot valet cētenariū casei
uidelicz sol 16 4 dr 11 10 De eodē p libras
Tem pond valet lib 17 20 1 q̄ntū valet g̃ lib 7 8 z d scīde q̄em 4 mlt 1 p z 0 4 add z et
sol z 1 z quoz mlt p 7 8 z et z 0 7 7 1 q̄ duid debet p regla d z z 0 0 4 p z 0 q̄ fit lib
ugla habēt 0 0 0 0 ½ 10 10 11 z 0 ut lūi z ugla mlt z 0 7 7 1 p 6 q 6 capitib̄ ai z q̄z
ugla 4 hēbit z tpā ugla sic 0 0 0 0 10 10 11 z z 0 exhibit lib 1 7 10 17 z 0 6 d'carica pūcae
Carica pūcae q̄ pelat lib z 00 uēdit 1 4 4 sol 7 h̄ ē y q̄ē q̄ntū valet lib 8 6 mlt 1 4 p
z 0 4 add 7 et z 0 7 q̄ pē sīt 1 4 mlt ea p 8 6 et z 0 4 0 z q̄ duid p z 00 4 p z 0 habēt p
0 0 0 0 ½ 4 7 12 z 0 exhibit lib z 0 7 8 ½ 20 1 p p̄tio q̄ sint z libre 8 6 ut hic ostenditur:
Sicc debet fieri de quacūq; regla mūoz q̄bz duisionē placuit sicut mō fecim
de z 00 quā uult ipī regla fiat 0 0 10 10 mī ei cō 0 7 4 12 posuim ut hēat 12 sicut hēm
½ 20 illa. s. q̄z cum 14 De eadem carica
Tem carica pīma valet lib 11 4 sol 7 4 dr 4 hē lib 7 12 20 11 q̄ntū valet g̃ lib 12 7 9
huic 1 ¼ ½ 4 hē 1 ¼ ½ 12 12 7 scīde q̄em 4 mlt 11 plua ūgla et z 7 z 4 q̄ pē sīt
11 jm̄ mlt 12 7 plua ūgla hē p 12 4 add 1 4 q̄ z 4 add 1 q̄ ¼ q̄ 4 et 2 1760
huic mlt 1 q̄ē sīt ¼ 4 q̄ z et 14 tunc mlt 1 q̄ē sīt 4 ¼ q̄ z et 12 q̄ add ei 14 qui
2 1760 et 2 1787 q̄ pē sīt 12 7 4 mlt ea p z 7 z 2 et z 4 0 ¼ 8 8 7 z z quae
duid p regla z 00 p eā nup̄ exhibit lib 0 0 0 0 0 0 7 10 ½ 8 2 10 10 10 12 20 ¼ p p̄tio ullius
quelarum libuerit. De rotulis
Rotuli 27 valet lib 11 q̄ntū valet g̃ pe 18 mlt 11 p 18 et 198 q̄ mlt p 12 4 p z 0 hē p z 0
nus habeamus ea m ugla et ¼ 7 4 z 0 q̄ duid p 27 12 0 20 exhibit 12 0 7 27 12 20 7
p p̄tio de pe. 18 De eodem.
Tem. pe ¼ 2 valet lib ½ ¼ 12 q̄ntū valet g̃ pe. ½ 18 mlt 12 p plua ūgla et z 6 3
4 mlt 18 p 4 add 1 et 27 q̄ mlt p z 6 3 et 3 4 z q̄ duid p regla d ¼ 2 s. p ½ 0
4 p z 4 add 4 p 4 q̄ lib sub ugula abbatū cuoz capitā eoz sic q̄ d ½ 4 ⅙ fiunt 12
4 d ¼ 4 ⅓ fiunt 20 4 hēbit unusq; eoz pmiū 1 0 12 20 exhibet lib 5 7 12 18 20 4 p p̄tio illoz ½ 11
Nunc factis ductū ē d'uē diuidēdis ānarū exhibitū diuisoz videz pluriū dīoz u
q̄bz idigen hīo ugla duisionū q̄oz 12 20 ut hēant lib sol d dr z. tunc
mlt nō de eisdē ī exhibitis. fiunt sol q̄bz idigebūt hīe cō 12 tanto ugla
duisionum ipoz ut q ½ 12 ex duisionibz remanēt. fiat de eis ex q̄ exhibitis
nibz ex ugla quae sunt sol. De ānt uendito pro sol et rupie
Tem ānt valet 4 ¼ 27 hē 6 27 4 dr z q̄ntū valet g̃ pe ½ 12 mlt 27 p 4 add 1 et
10 3 huic mlt 12 p z 4 add 1 et 12 7 q̄ mlt p 10 3 et 1 z 8 4 z q̄ duid p 10 3 4 p z 4 p
4 hē p 1 0 10 0 12 exhibit 4 z 10 10 12 11 De eodē p sol et dr

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Item cant̃ ualt̃ .f. 26 q dt̃ y b̃ é .f. 1/2 26 q̃nti ualt̃ g̃ p̃ 3/8 21 mk̃ 26 p̃ 12 q add̃ y er̃ 1/2 17 Jc̃ mk̃ 21 p̃ 8 q add̃ y ei̅ 24 1/2 q mk̃ p̃ 17 ei̅ 8 0 22 1 q̃ duud p̃ 1/8 0/10 0/10 0/12 ecluunt 1/8 7/10 1/10 5/12 8 De eo dē̃ p̃ soldis et dī̃ et rupt̃s

Item cãt̃ b̃ é 100 ualt̃ .f. 1/4 1/2 5/12 28 b̃ é .f. 28 q dīos 1/4 1/2 y q̃nti ualt̃ g̃ 11 3/7 q̃ ual 100 q lib 3/7 sc̃ unꝰ gmꝰ tō ñ sc̃ eccuna q̃tuor ut p̃dē̃ q 100 sc̃ p̃. q 3/7 sc̃ lib q̃ aut 1 lib 3/7 facãch sc̃ p̃. aut 1 p̃. 100 fiaãde ꝫ lib ut fiant ꝫ eccuno gñe um sit unꝰ q̃uutant. s. unꝰ p̃dit. ut p̃. sit albo. ut lib fiant q̃dē 1 p̃. 100 lib 7 ei̅ lib 148 p̃tit ꝫ alual sc̃ lib 140 q̃ ponãt in q̃ē puedutē p̃tii uni mk̃ 28 p̃ liã ugłam ei̅ 4 0 22 Jc̃ mk̃ 7 p̃ 7 q add̃ 2 ei̅ 41 q mk̃ p̃ 4 0 22 ei̅ 2 0 22 0/12 22 q duud p 148 q p̃ fiacriãcł. q̃ unsimt̃ coaptant fiacit 1/27 0/8 0/10 0/12 ecluñt. s. 0/27 7/8 5/10 5/12 1 l mk̃. tō tiam 1 41 . s. 17 p̃ 4 22 q tollet 2 1 ugłã q̃ sep̃ ōib; q̃ōib; ł̃q; mlt̃ plica tio q duuſio cadūt ꝛcłet obſtuate modii q uitandi ſup̃ dictū. De cant̃ uēdut p̃ cant̃ anſub; mal uēdat̃ ap̃ licłiã p̃ tarenſ 26 q̃nt̃ q̃r ualeãt p̃. 4 7 dicte q̃ē mk̃ mag̃ q ꝫ eccuduſo mdcł. 26 p̃ 4 7 ei̅ 1222 q duud p̃ regłaz 1 100 ap̃t̃ł ei̅ ut liãt mī 1/20 m capit ugłe tō q tarenſ p̃dit̃ gñare 0 tiunt. Et ea q̃ ſit 20 remanſit ei̅ gña. Regłaz mag 1 100 ē 1/4 0/20 iq̃ ſi duuſus 1222 ecluñt tarenſ 2/4 1/20 12 b̃ é tenſ 12 q gña 2/4 1/4 ut alit q; b;z inſūma mlt̃oꝝ 1222 ac̃ p̃ 100 tarenag 12 tō q. 1200 sc̃ cant̃ 12 dīi ea q̃ remanſ .f. 22 duud p 4 q̃ ea duuſiē̃ p̃uenit. 1. 2/4 1/4 ſuit gmna ut modo mueniꝰ. De eodem

Item cant̃. uēdut̃ p̃ tarenſ 1/4 47 q̃nti ualt̃ g̃ p̃. 8 21 b̃ é cant̃ 8 q 12 21 mk̃ g. 47 p̃ 4 q add 1 ei̅ 22 q mk̃ p̃ 8 21 ei̅ 1 2 0 22 q duud p 100 q p̃ 4 b̃ é p 1/4 0/4 0/20 ut p 1/20 0/10 0/10 q̃ē pulat̃ ecluñt tarenſ. 1/2 1/10 11/20 1 47 q tarenſ 1 47 q ꝫ exponde meſſane q uoluñt ſcire q̃r uē sc̃ duud q̃ 1 47 p̃ 20 tō q tarenſ 20 fiacit ibi ſimat ecluñt uē 2/2 14 ſcñ ſuper 1 47 ei̅ 2 ponde p̃uenit duud 1 47 p 1/2 27 deo qua mē̃ p̃uenit ē tarenſ. 1/2 27 De eodem

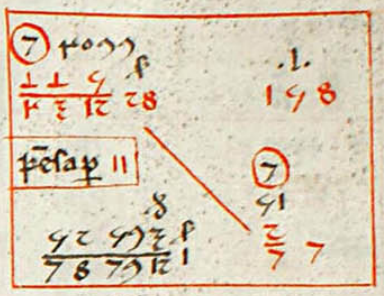
Item cant̃ uēdit p̃ tarenſ 11/20 127 b̃ é tarenſ 127 q gña 11 q̃nti ualt̃ g̃ p̃ 1/4 1 2 mk̃ 127 p̃ q add 11 ei̅ 2 4 9 1 Jc̃ mk̃ 1 2 p̃ q add 1 ei̅ 16 3 q mk̃ p̃ 2 4 9 9 1 eñt 12 1 13 q duud p 100 q p̃ 4 p̃ 20 ecluñt tarenſ 1/4 2/10 0/10 0/20 4 2.

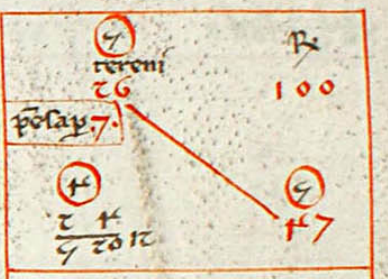
Vnc ſant̃ ſuenduñoib; p̃tarenſ dict̃ ē. ſluē uo 2 uēdtnoib; rei̅ g̃ b;zamus 2 gurlo tarenſ quoꝝ unꝰ q̃lq; ē mlt̃ arenſoꝝ 10 q̃r op̃ ē ut m p̃ſ ſep̃ tm 1/10 m capit ugę duuſiomi ut q̃ ſup̃ 10 remanſunt fiãt milia rēſoꝝ.

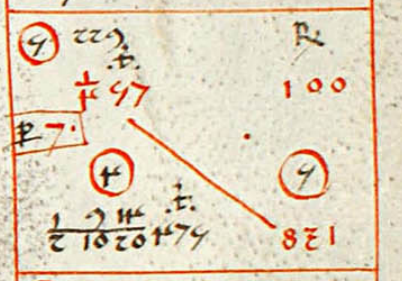
Scant̃ aſſub; mal ap̃ garbã uēdut̃ p b;z 1 47 q̃nti ualt̃ 12 2 3 dicte q̃m et mk̃ 47 p̃ 23 q ꝫ eccuduſo ei̅ 18 2 2 q duud p 100 . s. p 1/10 0/10 ecluñt b;z 2/10 1/10 18 b̃ é b;z 18 q mk̃ 2/10 2 q tñ ualt̃ alit p̃. 2 3

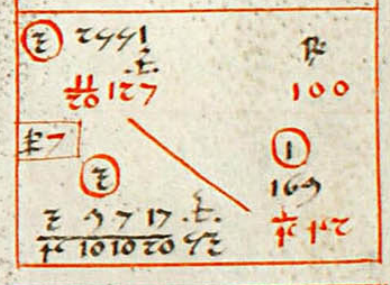
Bcrame 100 ualt̃ b;z 2/4 1 2 q̃nti ualt̃ g̃ became 21 mk̃ 1 2 p̃ 4 q add 2 ei̅ 171 q mk̃ p̃ 21 ei̅ 2 3 1 que duud p 100 q p̃ 4 b̃ é p 1/4 0/10 0/10 ecluñt b;z 2/4 2/10 1/10 8 p̃ p̃uo ualt̃ became 21 2 1 De cant̃ uendito p b;z et ondit

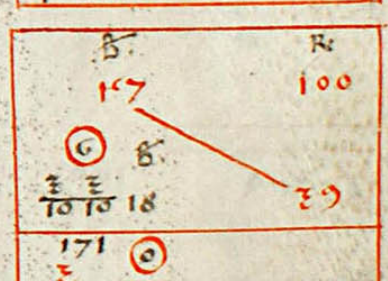
Item cãt uēdit̃ p b;z 2 2 q mk̃ 1/2 1 4 b̃ é p b;z 1/2 1/10 2 2 q̃nti ualt̃ g̃ p̃ 1 4 21 mk̃ 2 2 p̃ 10 q add 4 q p̃ 2 q add 1 ei̅ 4 6 3 Jc̃ mk̃ 21 p̃ 4 q add 1 ei̅ 12 3/4 q̃nti q̃me. s.

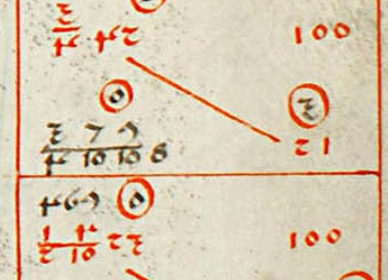


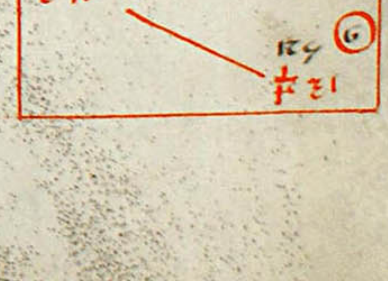


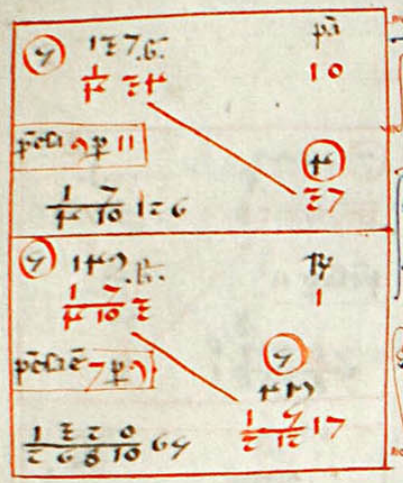












5 mul. p. 4 6 9 et summa diuid. p. quantitatem quinte de 100 s. p. 4 et p. omnes numeros quos sub virgis exibit
bis 1/4 2/8 3/10 7 **De cena pannellium in garbo vendita**

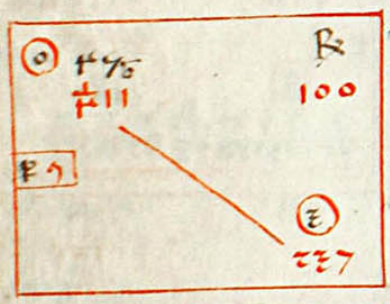
Pannelli 10 valent bis 1/4 34 quantum valent ergo pannelli 37 mul. 34 p. 4 et add. 1 erunt 137 que mul.
p. 37 erunt 5069 que diuid. p. 10 et p. 4 de virgula hec est p. 1/4 0/10 exibit bis 1/4 7/10 126 hec est bizantii
126 et mul. 1/4 7 **De Rotulo**

Rotulus zaffarani vel nutium muscatarum vel aliarum quarumlibet mercium vendit. pro bis 3
et mul. 1/4 7 hec est pro bis 1/4 7/10 quantum valent ergo rx. 17 et vnc. 1/2 5 hec est rx. 1/2 5/12 17 describe quoniam
ut hic erunt et mul. 3 p. 10 et add. 7 que p. 4 et add. 1 erunt 149 Item mul. 17 p. 12 et add. 5 que p. 2 et add.
1 erunt 419 que mul. p. 149 et diuid. summa per fractiones aliorum numerorum exibit bis 1/2 3/6 2/8 0/10 65
ut supra in descriptione ostenditur. **De eodem**

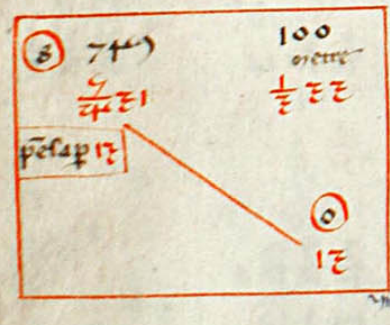
Veni si eadem res quis queret quantum valent vnc. 1/2 5 tantum fac vnc. de rx. 1 erunt 12 de in pecunia in quo de vnc.
12 zaffarani valent bis 3 et mul. 1/4 7 hec est bis 1/4 7/10 3 et quantum valent vnc. 1/2 5 querit. multiplicando
ut supra 3 per suam virgulam erunt filii 149 et mul. 5 p. 2 et addes 1 erunt 11 que mul. p. 149 erunt 1639
que diuid. p. 12 et per reliquas fractiones hec est p. 1/2 0/6 0/8 0/10 exibit bis 1/2 3/6 0/8 7/10 1

Nunc satis de his que ad bizantios mul. pertinent de prima parte huius capituli dictum est nunc vero de eis que
pertinent ad bizantios saracenatos vel ypperpos dicimus in quibus indigebimus ut habere in capite
virgularum de 24 hec 1/3 0/8 ideo quia unus quisque illorum bizantiorum in se caratos 24 continet. Et hec que sunt 1/3 0/8
et diuisionibus remanent. Ideo esse non dubitabis **De cantaro lini vel alterius cuiuslibet mercis que vendit in sarra**

Si cantaro lini vel alie cuiuslibet mercis apud suriam vel alexandriam vendatur pro bis 4 sa. in alexandria
mercatis et volueris scire quantum valent rx. 37 describe quoniam et mul. 4 p. 37 erunt 148 que diuid. p.
100 exibit bis 8/10 4/10 1 si autem de 8/10 4/10 unius bis lex facere volueris mul. 4 que sunt 10 per aliam 10 et
add. 8 erunt 48 que mul. p. lex unius bis s. p. 24 erunt 1152 que diuid. p. 1/10 0/10 exibit lex 2/10 5/10 11 vel
ut hec summa in una multiplicatione mul. 148 p. quartam de 24 s. p. 6 et diuid. summam p. quartam de 100 et p.
regulam de 24 exibit sicut bis 3/5 2/5 2/3 3/8 1 hec est bis 1 et lex 2/10 5/10 11 quia si multiplicaueris 3 que sunt sub
8 p. 3 que sunt sub virgula et addes 2 erunt lex 11 Et 3/5 2/5 que sunt in virgula p. 1/3 0/8 sunt partes totius unius lex. et sic
semper faciendum est de omnibus aliis in quibus ponitur in capite virgule 1/3 0/8 videlicet multiplicare hec que erunt sunt 8 p. 3
que erunt sub 8 in virgula et hec que erunt sunt 3 ut in fecimus et [illegible] virgule. **De eodem**

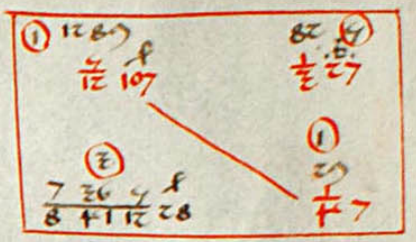


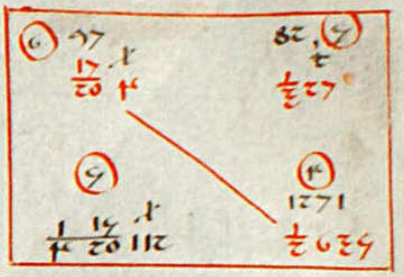
Item cantaro valent bis 1/4 11 quantum valent ergo cantaro 2 et rx. 37 hec est rx. 237 mul. 11 p. 4 et add.
1 erunt 45 quorum quinta s. 9 mul. p. 237 que totum et mul. p. 3 ut habemus regulam de 24 sub virga
erunt 6399 que diuid. p. quintam de 100 et p. 4 que sunt sub virga et p. 3 que addidimus multiplicationi que veniunt
aptata in 1/10 0/3 0/8 exibit bis 9/10 0/3 5/8 26 ut in hac questione describitur. **De mil. olei constantinopoli**

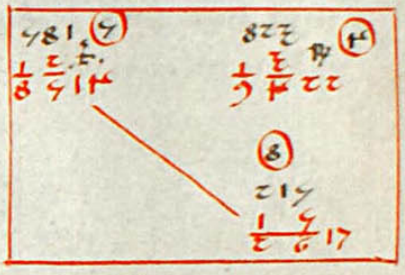


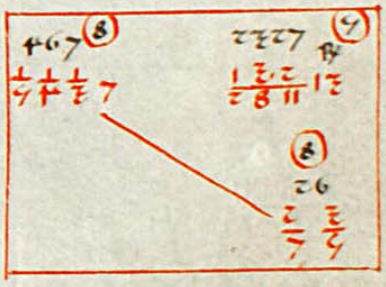
Miliarium olei apud constantinopolim que est metrum 1/3 33 vendatur pro bis 5/24 31 quantum valent ergo metrum
13 describe questionem et mul. 33 p. 3 que sunt post quam in virgula et add. 1 erunt 100 que pro sunt 33 ut in
feri in descriptione cenni dicimus mul. 31 p. 24 et add. 5 erunt 749 quos pro sunt 31 et mul. 749 p.
13 erunt 9737 que mul. p. 3 que sunt sub virgula de 33 erunt 29211 que diuid. p. 100 que posita sunt 33
et p. 24 hec est p. 1/10 0/10 0/3 0/8 exibunt bis 1/10 1/10 1/3 1/8 12 **De vnc. panonimi que mutuantur ad p.**

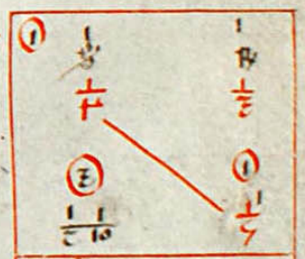
Vncia panonimi que est tarem 1/3 27 mutuantur ibi ad persoluendum pisas soluendum pisas
pro sol. 5/12 107 querit quantum valent eadem res tarem 1/4 7 mul. 27 p. 3 et add. 1 que sunt 3 erunt 82
[illegible] sunt 1/3 27 dicimus mul. 107 p. 12 et add. 5 erunt dicit 1289 quos pro sunt 107 Item mul. 7 p. 4

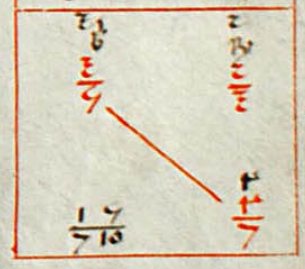












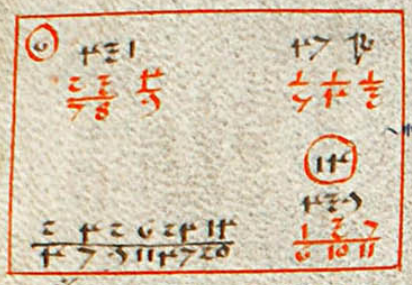
De rotul' q uendunt' p tarenis

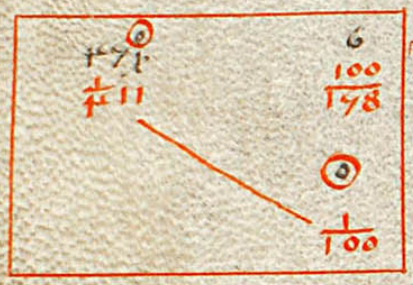
De rotul' eorum partes

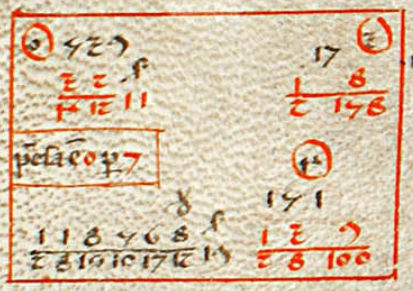
De parte .ro. p parte bis

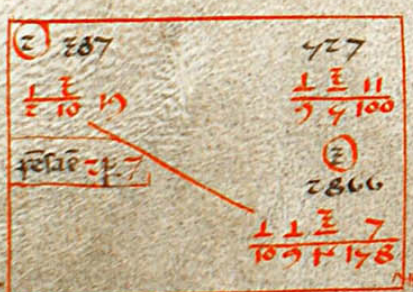
De parte .ro. p parte soldi

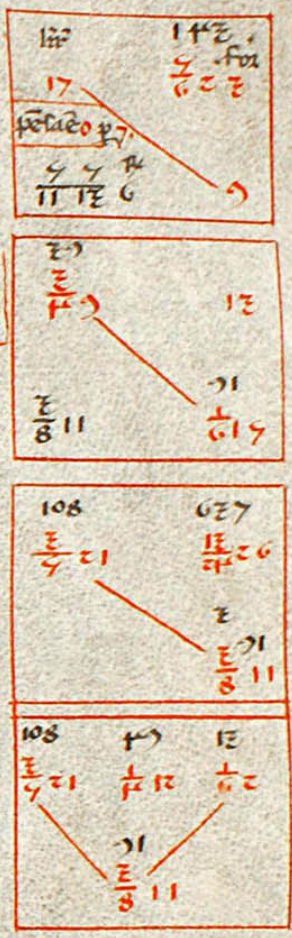
De partib; rotuli p partib; bicanj











Transcription of the dense abbreviated text:

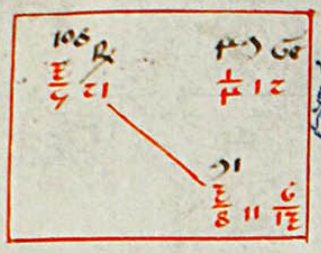
...tūn p y cē y y y y 1 o q duudel p ... bē p ... ecbunt dnam ... s.

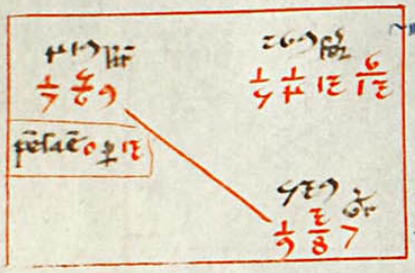
Cē tr 11 Gerun ualt ī alecādra lēr 17 qntū ualt tr. 7 forfor. qd tre 11 tr 7 ñ luit unī pōdil. ut dtre 11 Gerun. fuacl tr. forfon. ut dtre 7 forfon. fuacl tr. Gerun. ut fuāt ālo. ut forfon. ut Gerun. ꝫ qd dtre Gerunus 11 leuī potel facē tr. forfon. qđ dtre. forfon facēt Gerunū. ideq; unū qlqr. tr. Cet ē tr. 1/6 z forfon. qd simlūt tre 11 Cē. p 1/12 z fuacēt tre. 7/6 zz forfon. vñ dlcde dtre 7/6 zz forfon ualt. lēā. 17 qntū ualt tr. forfon. olt g 17 p 7 qz ecad ulo 7 duudez p 7/6 zz ecbt lēā. 7/11 7/12 6 De fo

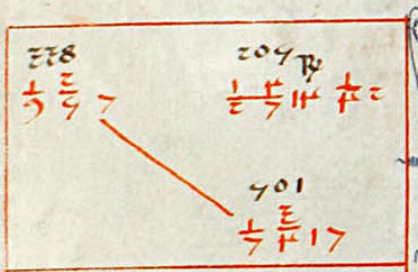
Cē tre 12 for. ualt lēā 7/12 7 qntū ualt tr 7 gēt. fuc. for. dtre 7 gēt. b ē mlt tre 7 gēt. p 1/6 z cēt re. 1/6 17 for. g dlcdel dtre 12 for. ualt lēā 7/12 7 qntū ualt tr. 1/6 17 for mlt 7/12 7 p 1/6 17 7 duudel p 12 7 cuntab ñ 1/12 aī posſibile ſit. 7 1/2 ſilr ecbt lēā. 7/8 11

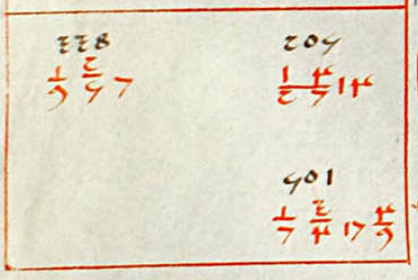
Cē tr. Cet 1/12 p lēā. 7/12 1 qntū ualt tr 7/8 11 for. fuc. tr. for. d Communiu

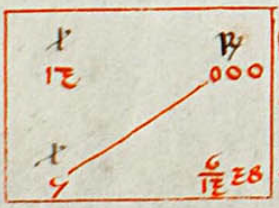
tre 1/12 gēt. b ē mlt 1/12 p 1/6 z cēt tr for. 12/24 z 6 dnū dlcde dtre 12/24 z 6 for. ualt lēā 7/12 1 qntū ualt tr 7/8 11 forfon mlt 7/12 1 p 7/8 11 7 duudel p 12/24 z 6 ecbuñ lēā. 0 0 z 7/12 7 10 12 7 ur ī huc dlcpte ēnt. possum ē b id opus ut ñdo mlone d 1/12 1/6 z qſupi mltuum udel ut dlcbūr ī qōe tr 7/8 11 forfon ſub 1/12 gerdū. dñ p udal dtre 1 gēt. quor forfon ſilr udel 1/6 z pē eñ 1/6 z aī 1/12 ut ī huc dlcpto caul. 7 cēt tē mlt qđ dtre 1/6 z uabz tr. 1/12 for. ualt lēr 7/12 1 qntū ualt g 7/8 11 forfon. mlt g ut ſpdixim 7/12 1 p 7/8 11 7 duudez p 1/12 7 p 1/6 z qſic ſit udel qmlcogz p 6 7 adde 1 qđ ē ſir 6 cēt 12 q pē ſir 1/6 z 7 mlt 12 p 7 add 1 qđ ē ſir cēt 7 q pē ſup 1/12 tre mlt 1 p 7 7 add 2 cēt 108 q pē ſir 7/12 1 7 ad huc mlt 11 p 8 7 add 2 cēt 1 q pē ſir 7/8 11 7 mlt 108 p 1 7 p ruptoz q ſ sub 1 7 ſub 12 ſ. p 7 p 6 cēt z z 7 8 7 z q duud p 12 7 p 1 7 p nūōl q ſt ſub ugul alioꝝ duoꝝ mdorum ſ. p 7 p 8 bē p 1/12 0 0 0 0 0 0 12 ecbt lēr 0 0 7 7 10 12 ur ſupi inuenim. vt alt dlcde qōne ſ. tr. 7/8 11 forfon ſub tre 1/12 Cēt. 7 udal d 1 tr. for. q pūl ſit unū tr. Cet. udel 1/12 huc rō q aī tre 1 gerd. ſit tr. 1/6 z for. g. tre. 6 Cet. ſt tr. 12 ſit. vñ tr. 1 for. ē 1/12 d tre 1 Cēt. ut ſpdixim. pē g 1/12 aī rotlōz 7/8 11 forꝝ ſicut ſupi in pcedū dlcptō posſum 1/6 aī rotlol 1/12 gerdunoz ut ī huc dlcpt. cē ēnt. 7 cēt tē mlt qđ dtre. 1/12 gerdunoz ualt lēā. 7/12 1 7 qntē qntū ualt 1/12 d tre 7/8 11 gerd. q ſic fuacz mlt 7/12 1 p 7/8 11 1/12 7 duudel p 1/12 sic mlt 12 p 7 add 1 cēt q pē ſir 1/12 7 pē 108 end pē ſir 7/12 1 7 1 ſir 7/8 11 7 mlt 108 p nūōz q ſt ecad ulo udel p 1 7 p 6 7 p 7 7 p ... q ſt ſub 1 cēt ſilr z z 7 8 7 z q duudez p regłam d 1 7 p ruptos q ſilr ſub ugul reliquoꝝ nūoꝝ. ſ p 1/7 8 0 12 q comptatu aī 7 d dicul 1 facuñ ſilr 1/12 0 0 0 0 0 12 inq̄bz duuſil z z 7 8 7 z ecbuñ lēr 0 0 z z 7 10 12 ur ſupi bſ inuenim. 7 ur b q ī huc qōe d motuare uolum ñ ipedīet. ñ cuntum laboꝝ mlādi 7 duudi quō cuntare potum. ſz ut ñ diminuat magſtiū cuntādi laboꝝ ī qbz posſum qualr inb cuntādū fur oſtēdi m. 7 ō b q nūquā debem mltr aliquē nūm aī ſūma mlōl cogz p ſilēz ut p ſilēz dlcam ꝑa duudōr ut ī huc q mltuum 108 p 1 q p 6 q p 7 q ſt ſub ugla d 1 7 et



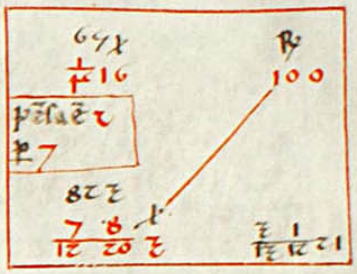


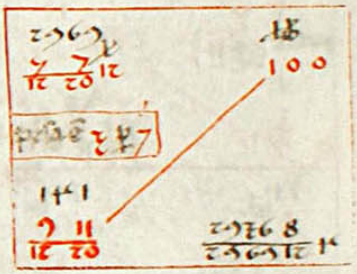


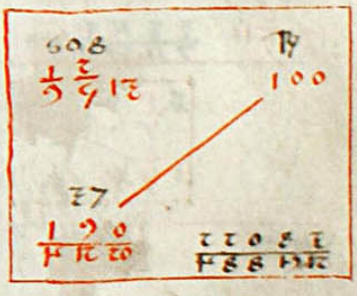




unae possumus eod̄ modo facē partes unusquisq; unae sm̄ partes ā fuīt ipse
unae sunt pisam &c. aut libre. ut̄ alicui alteri &c. Et ut mel̄ intelligatur p
namus ei qui p̄ 7/12 sunt d unaa pisane libre uñ si uelimus cognoscē exer
quot dn̄i sunt d autem. ido quotiēs cuilt̄ libre ponēt dn̄os 2 d ā
mīcab 7 que fuīt sup 12 p 2 4 duplet p 12 7 fiet mīligi d qbzlbz ūcul.
Item cuīt 16 4 quer̄ quot. &c. p. l. 7/12 8/20 2 quos de eodem ai rupis
huīt descēdo gōnem in hunc modum 4 mīa 16 p 1 4 adde 1 erūt 64 que p̄
sup 1/4 16 dn̄i mīa 2 pluam ungi erūt 82 2 que p̄ sup 7/12 8/20 2 4 mīa 100
p 82 2 que p 1 que sunt sub ungla d 16 4 duplet sūmam p 2 ang d 64 q
ē 1/4 0/12 4 p rupto; unīcui ungle. s. p 1/12 0/20 4 capta 12 in q̄ p
io qua ea que fuīt sup 12 erūt unaa. ut̄ unae. ēt ego a primo ullum
1/4 0/12 0/20 0/12 sz ut teneamus lalorem inuēndi 4 duplet relinquē mō d
100 4 relinquē duplio d 1/4 0/20 que fuīt inungla duplōi g̃ mīab 82 2 p
1 4 duplet sūm p 1/12 0/12 erūt p 7/12 1/12 2 1 placeo aī huius ra 4 simplū eī
ē quia supius dimonstratum uidelicz ut duas equales cum nūs ēquādo et
duplando ita egrediens cum quālibz pēla q̄mdo Quare pro lo huius pō
situm ē 2 p 7 reples. De ceīt pipis sedm ill̄m modum
Item centenarii pipis plabit 12 4 sol̄ 7 4 dr̄ 4 hoc ē plūs 7/12 7/20 12 quot libre
pipis habuīo p sol̄ 11 4 dr̄ 4 quia lab 7/12 7/20 12 4 sol̄ 7/12 11 sunt unīs g̃ q
pecu. 4 non sunt unius quantitatis cum 12 sunt. t. 4 sol̄ 11 sunt sol 4 mīa
t. 7/12 7/20 12 faciendi fuīt sol. ut de sol 7/12 11 faciende sunt l. d. ē pa
unus libre ut ficam fuīt unī g̃ ita sunt unius quantitatis g̃ d. sol 7/12 11
faciamus partem unī libre que sunt 7/12 7/20 4 dele unū sublatus 7/12 7/20 12 ut
in hac delēptione ostendit. 4 mīcetur 12 p suam ungla d 2 4 sa
11 p 12 4 adde 4 erunt 11 1 Et mīa 11 1 p 100 que p 12 4 p 20 que fuīt
ungla d 12 4 duplet sūmam p 2 4 6 4 ad 1/12 0/20 g̃ 12 4 mīab 11 1 p 100 d 11 100
d 12 p 20 n̄ oportebit duplē p 1/12 0/20 g̃ mīab 11 1 p 100 d 11 100
duplet p 2 4 6 4 ut ut ideamus unaa sup ungla 11 100 12
unū p 1 6 4 0/12 erūt p 8/12 De cīm ūeducto p lib cū q̄nq̄ uncis
um cuīt mīa lib 1/3 2/4 12 4 quanta quis p 1/4 d hac quer̄ dn̄o
libē p 1/4 2/12 0/20 unius libre ut sua 1/3 2/4 12 de
questio ut hoc ostendit 4 mīa 12 p suam ungla 608 p 100 quotiens
12 p 1 4 adde 1 erūt 7 Et mīa 7 p 100 que p 4 4 que sunt sub ungla
post 12 4 duplet sūmam p regulā d 608 que ē 1/4 0/8 0/12 p 1/4 0/12 0/20
rupta insimul capta sunt 1/4 8 8 10 12 0/12 4 hoc quadrat quando unc
lūt cuare solummodo 7 p totū 100 sz relinq 10 ungula 100 p quod relinq
quod 10 que ē mungla duplōnis g̃ mīab 7 p 10 que remanet d 100 7 p 4
dicta erunt 1664 0 que duplet p 1/4 8 8 12 0/12 erūt 2 8 4 0/12 0/20
Item si centenarii uendat p sol̄ 1/8 2/4 17 ad quantum libre ei 12/17 unus

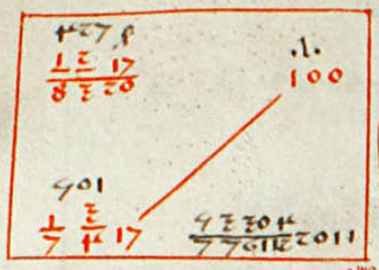


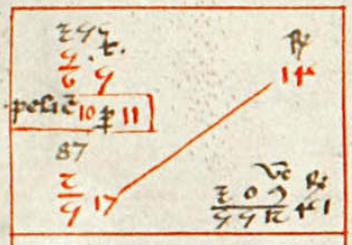


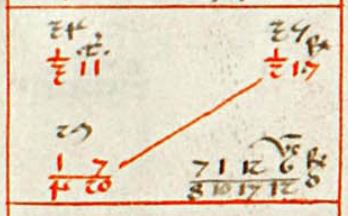


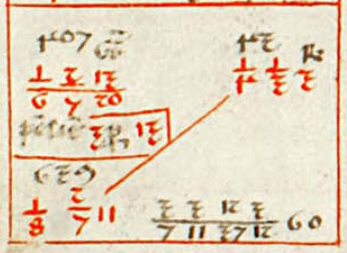
ualet lib.

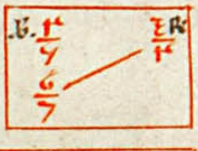
er q̄nc quantū q̄s er p̄ in
ce p libra 1/4 17 huīt ce
solet 1/3 2/4 17

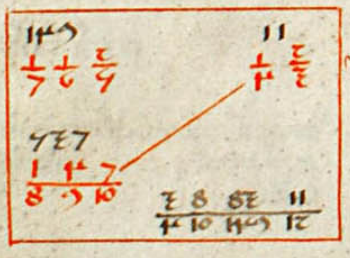












buūr ūte soldos $\frac{1}{8}$ $\frac{2}{7}$ 17 ad partes unus libre et $\frac{1}{8}$ $\frac{2}{7}$ $\frac{17}{20}$ unus libre ꝙ hec facias ut ambo nūi sint unus nomūs. deinde delebis qōne in hunc modū. ꝙ ubicūs secūm quod supius dictum ē. ꝙ habebis ꝓ quelita quantitate ullus metus lib $\frac{2}{7}$ $\frac{2}{7}$ $\frac{30}{61}$ $\frac{1}{12}$ 2011 Regula uniuersalis ubicūr

Olumus enī quandam regulam ꝺmostrare que ꝑtinet ex omni tōe mūdi ꝺductionum ipārum miōrum qui ponunt in similibz questiōibz. et hec ē ut ai ꝓponat quod centenarii pipis valeat libras quot libz absq; fractionibz ut ponam ꝑ. l. 12 ꝙ queratur quantū quis ꝓ dūs quot libz būit ut ponamus 2 semp multa dūos ꝓ 4 ꝙ duud ꝓ pretiū cētenarii. ut m bac. mlta dūos 2 ꝓ 4 erūt 14 que duud ꝓ 12 exibunt $\frac{2}{12}$ 1 ꝙ tot uncias huiꝰ pipis dūus 7 uerum si eadē rōne queat quantum ipe ꝑ sol' 7 habeas. mlta similiē 7 ꝓ 4 erūt 2 4 que duud similiē ꝓ 12 exibūt libre $\frac{2}{12}$ 2 sic intelligas ꝺ omnibz similibz.

Item si centum quelieris quantū eadē rōne uncie 7 ualeant mlta 7 ꝓ 12 ꝙ duudes ꝓ 4 exibunt dēn $\frac{1}{4}$ 18 Nam si quelieris quantum ualēt lib 7 eiusdem meti mlta similiē 7 ꝓ 12 ꝙ duude ꝓ 4 exibunt sol' $\frac{1}{4}$ 18 idē sol' 18 ꝙ dēn $\frac{2}{4}$ 2 ꝙ sic fiunt de similibz.

Item totuli 11 ꝑtarentis $\frac{2}{6}$ 4 quot ꝑles huiꝰ ꝓ tarentis $\frac{2}{4}$ 17 declarabo questionē hec mōdo et multiplica numeros qui sunt exadūso. s. 11 ꝓ $\frac{2}{4}$ 17 ꝙ duud ꝓ $\frac{2}{6}$ 4 exibunt. $\frac{2}{4}$ $\frac{0}{4}$ $\frac{2}{12}$ 1 1

Item ꝑ 17 ꝑtarentis $\frac{1}{2}$ 11 quantū habuīo excipis ꝑ gnus $\frac{1}{1}$ 7 hec ē ꝓ $\frac{1}{1}$ $\frac{7}{20}$ unus autem ut fiant exquantitate tarentoū $\frac{1}{2}$ 11 sup sēptuum. delebo questionē sic ꝙ mlta $\frac{1}{2}$ 17 ꝓ $\frac{1}{1}$ $\frac{7}{20}$ ꝙ duud ꝓ $\frac{1}{2}$ 11 ꝙ fac ut habeas 12 in capite ungule ꝑ ē uncias ꝙ exibūt uncie $\frac{7}{8}$ $\frac{1}{10}$ $\frac{12}{17}$ $\frac{6}{12}$ De ꝑ uēdūt ꝑ gnus ē qui retur inuenire

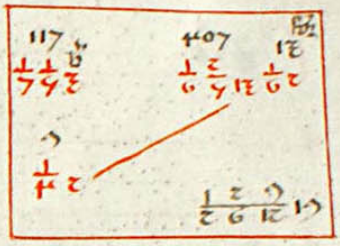
Item ꝑ $\frac{1}{1}$ $\frac{1}{2}$ 2 ꝑ gnus $\frac{1}{6}$ $\frac{2}{4}$ 17 quot totulos habuero ꝑtarentis $\frac{1}{8}$ $\frac{2}{7}$ 11 hec pauci unus tarentum ꝺ gnus $\frac{1}{6}$ $\frac{2}{4}$ 17 erunt $\frac{1}{6}$ $\frac{2}{4}$ $\frac{17}{20}$ Et delebis qōnem sicut inferius ostenditur et multiplicab $\frac{1}{1}$ $\frac{1}{2}$ 2 per $\frac{1}{8}$ $\frac{2}{7}$ 11 ꝙ duudes ꝓ $\frac{1}{6}$ $\frac{2}{4}$ $\frac{17}{20}$ exibunt totuli. $\frac{2}{7}$ $\frac{2}{11}$ $\frac{12}{27}$ $\frac{2}{12}$ 60.

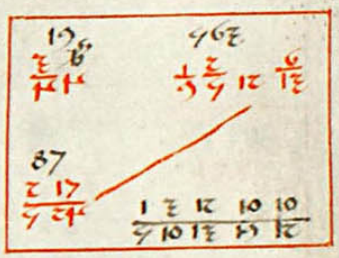
Item $\frac{2}{1}$ unus totuli ꝓ $\frac{2}{4}$ unus bizantii quantum habuero ꝓ $\frac{2}{4}$ unū bizantii delebe questionem et mlta 2 que sunt sup 1 ꝓ 6 que sunt sup 7 erunt 18 que ꝓ 4 que sunt sub ugula supiori erunt 30 que duude ꝓ 1 que sunt sup 4 ꝙ ꝓ 1 ꝙ 7 que sunt sub alia ugula. idest ꝓ $\frac{1}{2}$ $\frac{3}{4}$ $\frac{0}{8}$ exibunt $\frac{2}{4}$ $\frac{6}{8}$ unus ꝑ. De ruptis totulorum

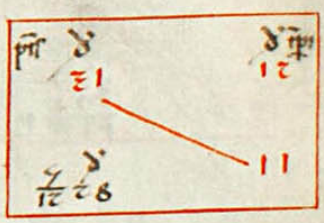
Item $\frac{1}{1}$ $\frac{2}{2}$ unus totuli ꝓ $\frac{1}{4}$ $\frac{1}{6}$ $\frac{2}{4}$ unus bizantii quantum habuīo ꝺ ꝑ ꝓ $\frac{1}{8}$ $\frac{1}{3}$ $\frac{7}{10}$ unus bizantii delebe questionem sic ꝙ mlta $\frac{1}{1}$ $\frac{2}{2}$ ꝓ $\frac{1}{8}$ $\frac{1}{3}$ $\frac{7}{10}$ et ꝙ duud ꝓ $\frac{1}{4}$ $\frac{1}{6}$ $\frac{2}{4}$ quod sic fiet accipe prius $\frac{1}{1}$ $\frac{2}{2}$ ꝙ mlta 2 que sunt sup 2 in 1 et 1 quod ē sup 1 in 2 ꝙ adde in simul erunt 11 que pone sup $\frac{1}{1}$ $\frac{2}{2}$ Et inuenies numos de $\frac{1}{4}$ $\frac{1}{6}$ $\frac{2}{4}$ erunt 11 que pone sup $\frac{1}{4}$ $\frac{1}{6}$ $\frac{2}{4}$ Et inuenies numos ꝺ $\frac{1}{8}$ $\frac{1}{3}$ $\frac{7}{10}$ erunt 427 ꝙ multiplicab 11 ꝓ 427 que proptes

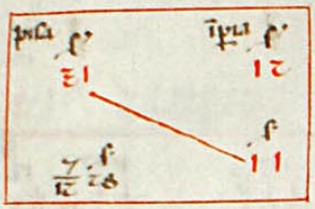
qui sunt sub ungul' sub 11 ⊃ ·s· ℔ ⁊ q℔ 6 q℔ 7 q duudes summa ℔ 11 ⊃
℔ rupt⁹ qui sunt sub 11 q sub ⁊ 7 hoc ē ℔ $\frac{1}{2}\ \frac{0}{1}\ \frac{0}{8}\ \frac{0}{\supset}\ \frac{0}{10}$ qui simul ∞
aptati sunt $\frac{1}{8}\ \frac{0}{\supset}\ \frac{0}{10}\ \frac{0}{11\supset}\ \frac{0}{12}$ eunal' b̄ q̄ eantare pōt̄ scribī. $\frac{\text{X}}{1}\ \frac{8}{10}\ \frac{8\text{X}}{11\supset}\ \frac{11}{12}$ Vide fo. et fo.
ran ꝛc. Geroum $\frac{1}{6}\ \frac{\text{X}}{\ }$ 12 ℔ bizanta $\frac{1}{7}\ \frac{1}{7}$ 2 quot ꝛc. fo. habuero ℔ bizantaus
$\frac{1}{1}$ 2 quia uenditio fit de ꝛc. Geroumus. q questio fit de ꝛc. fo fo umus ideo
de ꝛc $\frac{2}{\ }\ \frac{\text{X}}{7}$ 12 Geroū. faciendi sunt ꝛc. fo fo. hoc ē mīta col ℔ $\frac{1}{2}$ 2 q uenien
tem summa pone mḡone p uenditione. Et ut euitemus laborem dicte
mīonis. pone $\frac{1}{2}$ 2 ante ꝛc $\frac{2}{\ }\ \frac{\text{X}}{7}$ 12 ut supius in similibꝫ facē ōmodum
mul. q dele de q̄onem sic. q mīta 2 ℔ 6 q adde 1 erunt 12 que pone sup $\frac{1}{2}$ 2
dend' multiplica 12 ℔ suas ungulas erūt 1°07 Et mīta 2 p suas ungulas erūt
117 post hec mīta 2 ℔ 1° q adde 1 erunt ⊃ que pone sup $\frac{1}{1°}$ 2 q mīta ⊃ ℔
numeros qui sunt ei eradito. unde 12 q ℔ 1°07 erunt 1° 7 6 1 ⊃ que
mīta p ruptos qui sunt sub 117 unde ℔ ⁊ q℔ 7 q duude p summam p re
gulam de 117 que ē $\frac{1}{\supset}\ \frac{0}{12}$ q ℔ numos qui sunt sub ungulis oppositorum
numōrum unde ℔ 6 que sunt sub 12 q℔ ⁊ q℔ 6 que sunt sub 1°07 q
℔ 1° que sunt sub ⊃ uenū si laboīe mīcandi q duudendi eu tame uoluis
confidem aim dicamus mīta ⊃ ℔ 12 q relinq eorum mītonem quod non
mīcet ea. q ñ duudes ℔ ⊃ q℔ 12 que sunt in ungla duulionis. g̊ remanꝫ
ēm ut in 1°07 ℔ ruptos qui sunt sub 117 q remanꝫ ut duudes per $\frac{1}{2}\ \frac{0}{\ }\ \frac{0}{8}\ \frac{0}{\supset}$
q quib⁹ relinquet ēm quod ñ mīcab ℔ ⁊ que sunt sub ungla sub 117 q℔
duudes ℔ ⁊ que sunt sub ungla duulionis. g̊ mīcab 1°07 ℔ 7 que sunt
sub ungula sub 117 q duudes ℔ $\frac{1}{2}\ \frac{0}{8}\ \frac{0}{\supset}$ hoc ē ℔ $\frac{1}{2}\ \frac{0}{\ }\ \frac{0}{12}$ ut ībamus in alias
sup 12 q albū. ꝛc. $\frac{1}{2}\ \frac{2}{6}\ \frac{\supset}{12}$ 1⊃ fo. ut supius in similē oſtēdit. Si eodē in
tem sidereū quod ꝛc $\frac{1}{\supset}\ \frac{\text{X}}{7}$ 12 fo. ualēt bizātia. $\frac{\text{X}}{1°}$ 1° q quot totū. conuerto
geroumos quos ꝑdā $\frac{\text{X}}{7}$ 17 hoc ē ℔ $\frac{\text{X}}{7}\ \frac{17}{2\text{X}}$ unus bizantios habuēt quereuntꝫ
qua unus quisq ꝛc. fo. ē $\frac{6}{12}$ unus ꝛc. gero. ponende sunt $\frac{6}{12}$ ante. ꝛc.
$\frac{1}{\supset}\ \frac{\text{X}}{7}$ 12 fo. ut in hac deceptione oſtēdatur. Et accipiet $\frac{1}{\supset}\ \frac{\text{X}}{7}$ 12 et multab
12 p suas ungulas erūt 7 6 2 deind' accede ad $\frac{\text{X}}{1°}$ 1 q mīcab 1 ℔ 1° q adde 2 erunt 8 7 q mīcab 87
℔ ⁊ 1°m mīcab 17 que sunt sup 2 1° ℔ ⁊ q adde 2 erunt 8 7 q mīcab 87
℔ ⁊ que sunt ei eradito sup 12 que ℔ ⁊ 6 2 que ℔ 1° que sunt sub ungula
sub ⊃ q duudes summa p ⊃ q℔ numos qui sunt sub ungulis oppositorum
numerorū unde 12 ℔ ⁊ q℔ ⊃ q℔ 12 q℔ ⁊ q℔ 2 1° hoc est ℔ $\frac{1}{\ }\ \frac{0}{\ }\ \frac{0}{\ }\ \frac{0}{\ }\ \frac{0}{\ }\ \frac{0}{\ }$
q eunal' quod eantare pōt̄. q habeb ℔ q̄sum quantitate. $\frac{1}{\ }\ \frac{\text{X}}{\ }\ \frac{2}{\ }\ \frac{10}{\ }\ \frac{\text{X}}{\ }$
unus totū geroum. Pars sedā octaui capitli de cābus monetar

Si solidus imperialium. s. dūi 12 aut annulus alie monete uendatur p duos 2 1
pisanos. ut p alios quibꝫlibꝫ. q querunt quot dāos pisanos quis p impe
rialib⁹ habuēt discabel questionē unde 12 primo uendutionē. s. imperiales
12 deind' mutuatione retro scies primum illorum. s. dāos 2 1 pisa
nos. Et imperiales 11 ponēs sub imperialib⁹ 12 ut hic ostendatur. q mīcabis

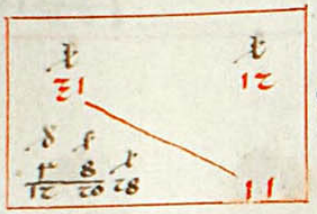




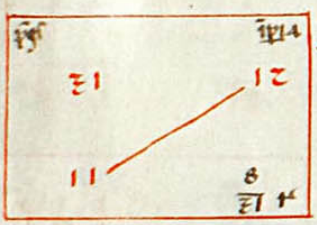




numōs qui sunt eorūdē. s. 11 p 21 erunt 32 + 1 q̄ ducti in 12 erūt 384 Et
Et sicut qua quot dr̄ōs pisanos ualz̄ solidus imperialium. s. imperiales
12 tot sol'. pisanos ualz̄ sol' 12 imperialium. q tot libr̄ pisane ualz̄ lib'.
12 imperialiū ut sic dicā. quod sol'. imperialiū ualz̄ ut p̄cipimus pisanino
21 et quotūs quantū ualz̄. sol' 11 imperialiū erit tunc tal' questio quod
sol' 12 imperialium. ualz̄ sol' 21 p. quaritur quantū ualz̄. sol' 11 imperia
lium. dicebo q̄ueq; ut supius q multabo 21 p 11 ut p̄cepimus q ducēdo
simul in 12 Et sic orabunt sol' 252/12 hec ē sol' 21 et dicū q pisanos
ut in hac sēda cōmutat̄ d'scriptione. De eodem



Rursus eadē rōne quaeratr̄ quantum ualeāt. l. 11 imperialium eō
tunc tal' questio. Quod lib' 12 imperialium ualz̄ lib' 21 p. quare sēcun
dē questio ut supr̄. multiplicanda 11 p 21 q ducendū ē sūma p 12 ut p̄di
ximus q habeb' libras 252/12 21 ut in hac alia d'scriptione ostenditur.
Nam si 252/12 unius lib'. sol'. facē uolūt. multiplica q que sunt sup 12 p 20
erunt sol' 100 que ducti in 12 que sunt sub angla orabūt sol' 8 q dicū
q sol' 11 imperialiū ualēt. l. 21 8 q sol' 8 q dicēs q ut p q multiplica 21 + 1 que
sūma multiplicata in 11 q ducti simul p q 12 hec ē p 252/12 d. 20 et
habebi sol'. q dicēs in p̄dicta diuisione. Quia que sūt 20 eedē sunt erunt sol'.
q que remanēt sup 21 erunt duo solidi. q ita soldi ē dicū p De eodem



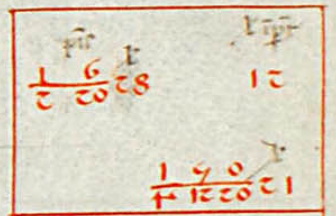
Rursus sol'. imperialium ualz̄ pisaninos 21 ut p̄cipimus. q quotūs quot
imperiales quis̄ pisaninus 11 habitūs. quia 11 sunt unius dni. q sunt
pisanini. Supponēbus dē sup 21 et sup 12 q p̄cedit sub 21 s. pisaninos
sub pisaninis. ut in hac d'scriptione ostenditur. multabus ut aq 11 p
12 erūt 132 que ducti p 21 orabūt imperiales. 8/21 p De eodem

Item sol' januinus uendituri p dicū 12/21 pisaninis q quaeritur quā
tum ualēāt sol' 7 q dicēs q januin. hec ē sol. 7/12 7 delebo questionē sic q
multiplicabo ut q adde 1 que sunt sup 12 erunt 12 + 7 que pone sup 12/21
Item multiplica 7 p 12 q adde q que sunt sup 12 erunt 84 q que pone sup 7/12 7
q multiplica 12 p 84 erunt 252 7 que ducti p sol'. s. p 12 q p numōs qui
sunt sub angulis udelicet p 12 q p 21 qui numeri minimi exceptati
inuenūt 1/2 8/8 5/12 orabunt sol. 7/8 7/8 7/12 De eodem.

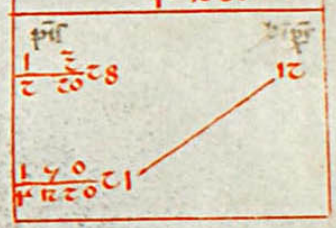
Item si eodem eadē rōne quaerantur quot januinos p sol' 7/12 7 pisano
monere habuiss. declarabo 7/12 7 sub 12/21 in d'scriptione. idō quia sunt
eiusdem generis. udelicet pisanorum q multabo 7/12 7 p 12 que sunt ex
aduerso. q ducti p 12/21 Ducti sic fiet in uicem 12 + 84 q delebo ex maiōri
sup 12 q multabo 84 p 12 que sunt ei ex aduerso que p 12 que sunt sub
angula posita 21 erunt 252 que ducti p 12 q p 12 que sunt sub an
gula posita 7/12 7 orabunt sol' 252/12 + ut in hac d'scriptione ostenditur.
Item sol'. mengulienses. s. dicī ualet apud gnmeam De eodem

dñs $\frac{1}{4}$ 12 regalium ꝙquentur quantum valt $\frac{1}{2}$ 4 ꝙ sol' 12 hoc $\frac{17}{20}$ 4 mo
guinensium. ꝯ am quentur de libris talis ē quelibet quad' 12 morgulen
sium ualent lib' $\frac{1}{4}$ 1 2 regalium. dēde uaq; ꝑ nem hoc ꝙ accidit de $\frac{1}{4}$ 12
multans 12 $\frac{1}{4}$ ꝙ adden' 1 eunt 4 2 dnī multab' 4 p'mam uirgulam
eunt 11 2 et multiplicab' 4 2 $\frac{1}{4}$ 11 2 eunt 4 2 8 2 que dnide p 12 ꝙ $\frac{1}{4}$
ꝙ 20 que sunt sub uirgul' scribunt lib' $\frac{1}{4}$ $\frac{2}{12}$ $\frac{1}{20}$ 6 Iam h. 4 ꝙ sol' 12
regules ē posuers. et nolūt eccl's emere morgulenses. dēde nunc $\frac{17}{20}$ 4
sunt $\frac{1}{4}$ 12 qua sunt unius gaīs. et multiplicab' $\frac{17}{20}$ 4 $\frac{1}{4}$ 12 que eunt
eradūso ꝙ dnide $\frac{1}{4}$ 12 hoc ē multiplicab' 11 2 $\frac{1}{4}$ 12 que $\frac{1}{4}$ que sunt
post 12 eunt 4 $\frac{1}{4}$ 2 $\frac{1}{4}$ que dnide $\frac{1}{4}$ 4 2 ꝙ 20 d' uirgula h. p'mū scrib'
4 $\frac{1}{4}$ 2 $\frac{1}{4}$ per 12 ut hui' ip'i uirgula p 20 scrib'. t. $\frac{1}{4}$ $\frac{1}{4}$ $\frac{2}{12}$ $\frac{1}{20}$ 4 ut ꝓbatū.

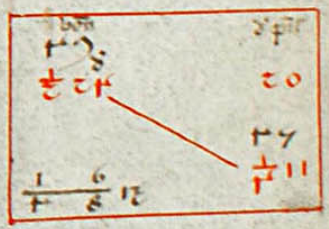
Item sol' turonensium. s. dā 12 ualent pedienses $\frac{2}{3}$ 17 ꝙ quentur quot
qui d' pedientibz plibus 2 1 et solidi 14 et dēi 3 turonensium. nūc
declare questionem ut hic ponatur et multiplicab' $\frac{2}{3}$ 17 ꝯ $\frac{2}{12}$ $\frac{14}{20}$ 1
que sunt eradūso ꝙ dnide $\frac{1}{4}$ 12 scrib' ut $\frac{1}{2}$ $\frac{7}{20}$ $\frac{14}{12}$ $\frac{1}{20}$ 4 6 pedientium
Item si ip'i libras $\frac{2}{12}$ $\frac{14}{20}$ 1 pedienses ē p' ꝑs. ꝙ dic' ē ecc's De eodem
turonensi emere. dēde uaq; pedienses sub pedientibz ut in primo dic'
questione demostratur et multiplicab' 12 ꝯ $\frac{2}{12}$ $\frac{14}{20}$ 1 et dnide $\frac{2}{3}$ 17
hoc ē m'cabis dicta 12 ꝯ 7 6 17 que sunt eradūso que ꝯ 2 que sunt sub
ungula post 17 ꝙ dnide 4 ꝯ 7 2 ꝙ $\frac{1}{12}$ $\frac{0}{20}$ que sunt sub ungula 12 posto
scribunt lib. $\frac{1}{4}$ $\frac{2}{3}$ $\frac{1}{12}$ $\frac{11}{20}$ 1



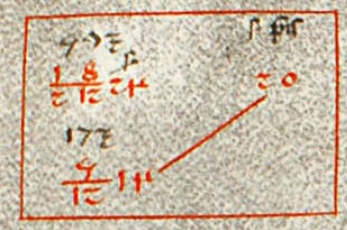
Vbuc solidus impialium ualeat pisanos $\frac{1}{4}$ 8 ꝙ amplius dē $\frac{1}{2}$ 1 una
quaq; libra impialium ꝙquentur quot pisanos bonent' plib' 2 1
ꝙ dī $\frac{1}{4}$ impialium hoc ē p'bus $\frac{1}{4}$ $\frac{1}{12}$ $\frac{0}{20}$ 1 quia solidus ē ungula libre
dnide dī $\frac{1}{2}$ 1 ꝯ 20 scribe $\frac{1}{2}$ $\frac{1}{20}$ unius dēi. p. que ad' am p'te solidi
sic impiales 12 ualebūt pisa. $\frac{1}{2}$ $\frac{9}{20}$ 8 Quare lib' 12 impiales ualent
$\frac{1}{2}$ $\frac{9}{20}$ 8 p'ēs uaq; $\frac{1}{4}$ $\frac{1}{12}$ $\frac{0}{20}$ 1 sub lib' 12 impialium ꝙ multabis ꝑ ꝙ
ꝯ $\frac{1}{2}$ $\frac{9}{20}$ 8 et sūmam dnide ꝯ 12 et habebis pro solido. Et si solidus im
pial' ualeat pisanos $\frac{1}{4}$ 8 minus dī $\frac{1}{2}$ 1 una quaq; libra impial' minus
pisanis dī $\frac{1}{2}$ ꝯ 20 uelut $\frac{1}{2}$ $\frac{1}{20}$ que eradūte d' $\frac{1}{4}$ 8 remanent pisani
$\frac{1}{2}$ $\frac{7}{20}$ 8 ꝑ p'tio unius sol' impial'. Vnde si habuēris lib' 12 $\frac{1}{4}$ $\frac{1}{12}$ $\frac{0}{20}$ 1 pi
sanorum. d' quib' uis impiales mihi emere ꝯ 12 ꝙ dnide ꝯ $\frac{1}{2}$ $\frac{7}{20}$ 8

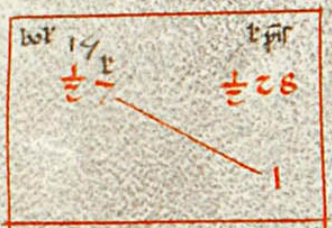


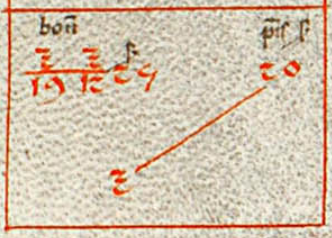
Et nota quod dēndantur plibus. uel plus uel minus. de pretio
sol'. tot ungesimas adden'. uel eqtalēs de ip'o pretio. et hui' ꝑ
tium ip'ius sol'. Explicat de cambio monetarum q̄ uenditarum ad
soldum. Incip' de cambio earūdē cū uenditis ad libras dic'
rum pisanorum. s. sol' 20 ualet lib' 1 bonorum. ꝙ
amplius bonorum 4 ꝯ hoc ē sol' 20 pisanorum ualent
sol' $\frac{1}{2}$ 14 lib. Quare pisa. 20 ualent bo $\frac{1}{2}$ 14 ꝙ lib' 20 pisa.



ualent .lv. lib. ℥ z4 Et quer̃tur quot bonom nos habeam̃tur pro
prisam̃ ℥ 11 Sic̃ dc̃ gonem ut hic ceam̃tur q mlca ℥ 11 p ℥ z4 q
duod̃ ppsa. z0 eabunt. lv. 1 6/8 iz Et si ambium libre. prisa. su
ent. lv. ℥ 46 hoc ē sol' z0 prisa ualeant. sol' z4 q dī ℥ 8 hoc est sol'
1 8/12 z4 et aut sare quot prisam. ualeat sol' 14 et dī. q bon. pc̃g
unq; sol' 2/12 14 sub soldus 1 8/12 z4 et mlca 2/12 14 p z0 q duodec
1 8/20 z4 hoc ē mulab' 17 z p z0 que p iz et p z que sunt sub unga
q duodec p 4/7 z et p iz que sunt unga de. 14 eabunt sol'.
Rursus ambium libre prisa sit bon. ℥ 47 hoc ē quod sol' z0 prisa. ua
leat sol' 2/1 z0 z4 et quer̃tur quot bon. ualent. l'. 17 et sol' 11 q dī
q prisa. dsepta gone multiplica 2/12 11/20 17 plb 2/1 2/20 z4 q duod plb'.
z0 pc̃. eabunt bon. Et si habūt lib 2/12 11/20 17 bon mlca.
eas p z0 q dunde p 2/1 2/20 z4 et habebis ꝓpositum.
Soldus unq; impialum ualz pc̃. ℥ z8 quer̃tur quot bon habeat ā
bum lib 1 pc̃. qua soldus impia. ē bon. z6 q pc̃. ℥ z8 ualent sol'
z6 bon. lib ℥ z8 pc̃. ualent lib. z6 bon. Et. lib. ℥ z8 pc̃ habē
ambium lib. ℥ 7 bon que sunt ad ℥ z8 ut z6 q qua querisam
bum unus. ut pone 1 sub l'. ℥ z8 ut in hac cntur dsepone. et
mlca 1 p ℥ 7 q duod p ℥ z8 hoc ē mlca 1 p 14 q duod p 47 93 ut
habeas unga 1/12 2/0 mlca dictam multiplicationem dī in 14 p
80 erunt 1200 que duod p 1/15 12/0 eabunt dī 1/15 2/12 5/20 hoc ē dī
1/15 z et tot ē ambium lib. prisa. Et si cont dicatur ambiū
unus lib. pn̄s. et sol' 4 et dī 1/15 z hoc ē sol' z0 pc̃. ualz sol. 1/15 1/12 z4
bon. q quer̃tur quot pc̃. ualeat solidus impiat. pro solido pc̃g
solid z sub solut. 1/15 1/12 z4 cum sol dus impia. sit solidorum. z bon
et mulcab ipā z p z0 que sunt ad quadrato et duodec p 1/15 1/12 z4 hoc
ē p 1/15 z4 que idem sunt cum 1/15 1/12 sint 4/15 tantum eabunt sol'.
1/1 1/12 z hoc ē dī ℥ z8 ꝓ pcio minus sol' impiat'.
Rursus ualeat soldus impialium prisarum ℥ z8 minus dī ℥ z p
quatuor libr̄ impia. et quer̃tur quot bon. hab ambium. lib
1 pc̃. et predicti dnarii. ℥ z eo mbe 1 2/20 d prisar. ℥ z8 s. d pc̃g.
14/20 z8 remanebunt prisar. ℥ 12/20 z8 pro pcio soldi impialium. Ergo
lib ℥ 12/20 z8 prisarum. s. lib z8 et sol 12 q dnar. q prisarum
ualent lib z6 bonorum. Quare ambium de lib z8 et sol' 12
et dn q ē lib 7 q sold' 7 q dnar. z bonorum que sunt alibg
z8 q sol' 12 q den. q ubq; in habes z6 Quare declarel questionem
ut hic ostendatur. q multiplicab 1 p 1 2/20 7 et duodec p 1 12/20 z5
eabunt 160 2/3 1 5/7 12/20







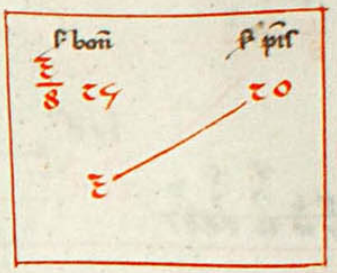
Item cambium libre prisan. sit bon. ℔ 61 hec ē sol' ℥ 8 z 4 bon. ualeant sol' 20 prisan. q̄ querunt pretium d' sol' ℥ bon. s. de sol' 1 imp. dic̄pta ua q̄ questione. mutā 24 pluam ungan erūt 20 ℥ mutab' ℊ ℥ p 20 que p 8 erunt 480 que dundena sunt p 20 ℥ saluet. p 1/7 0/24 83 mutā ea p 20 et p 12 erunt 1440 200 que dunde p 1/7 24 0/20 0/12 exibunt. 1/7 11/24 7/20 1/12 z hec ē den. 1/7 11/24 7/20 8 Et nom qua ido aptau 1/20 post 1/12 ut adderent sup centesima den. que ungunt. solido. qua quot ungesime contungunt solido. tot den. contungunt una libre. ℊ solous imp. ualz lib' d' 8 pi. q̄ tm sup d' 1/7 11/24 7 punam quamq; lib'. imp. 83 ex den. quinq; ungerunt libre contingat solido quarta unus d' una. et p d' 10 contingunt 1/2 et p d' 14 contingunt solido 1/4 unus d' ū. Ergo solous imp. ualz 1/4 8 et ampliꝰ den 1/7 11/24 z plibram. hec ē para unus d' 1/2 z ū solous imp. ualz pi. 1/2 8 una d' 1/2 z punam quamq; lib'. q̄ sic studat facē in libz libra uenetianorum. saluez solidi 20 uen Duenuanus cum uendūt ad libm datur plibus 12 q̄ solidi 4 parnorum. q̄ quer mumei er q̄t p̄a lib' podiꝫ quantum ualeat libra ponderiꝫ eorundem quā ponimus ē solidorum 12 q̄ d' una 1/4 4 multiplicab' 1/4 7/12 12 p 1/4 12 et duunde p 20 Et si libra ponderiꝫ uenetianorum ualeat libras 1/2 8 et uiꝫ scire pretium libre numerate saluet de solidis 20 multiplica 20 per 1/2 8 q̄ dunde p 1/4 7/12 12 et sic habebis indubitanē ꝓpositum. De libm argenti

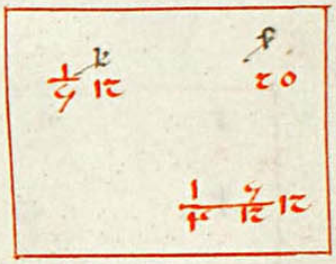
Libra argenti. hec ē unce 12 uendatur plibus 7 q̄ querunt quantum ualent unce 2 delebe in questione una ad sub una. s. 2 sub 12 q̄ mlt'. 2 p 7 que sunt eadē solo erunt 14 q̄ dunde p 12 exibunt lib' d' ozum 1/6 1 hec ē sol' 2 q̄ d' 4 ut in hac questione ostendatur. Vl' aliē quia unce 2 sunt 1/6 unius libre accipe 1/6 de libra 7 quod est solidi 2 q̄ d' 4 ut p̄dixim'.

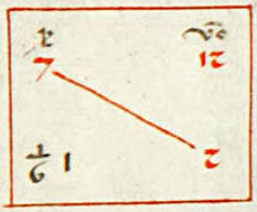
Item libra argenti uenditur plib' l' 7 et sol' 5 hec ē. l' 3/20 7 q̄ querunt quantum ualeant unc' 1/4 2 delebe questionem ut hic ostenditur. Et mlt' 1/4 2 p 3/20 7 q̄ dunde p 12 exibunt l' 1/4 11/12 7/20 1

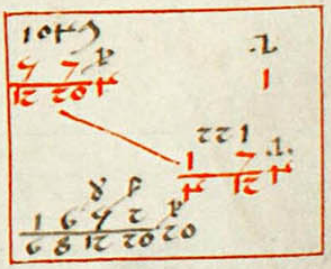
Item libra ualet l' 7 et sol' 11 hec ē lib' 7/12 11/20 7 q̄ querunt quantum uale. ant unce 7 q̄ d' una 14 ponderiꝫ d' amtem. hec ē unce 14/24 7 ido quia unce ponderant de sol' 2 q̄ de amtem delebe questionem ut hic ostendit̄ et mlt' 7/12 11/20 7 p 14/24 7 q̄ dunde p 12 exibunt lib'. 0/2 1/10 7/10 12/12 20/24 4

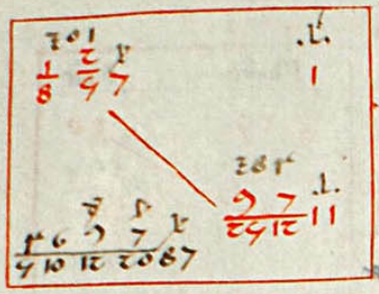
Item libra argenti uenditur plibus 7/12 7/20 4 regalum. q̄ quer De eode quantum ualeant lib' 4 q̄ unce 1/4 7 hec est libre 1/4 12 4 quia querunt in hac positione pretium librarum. describendum ē tantum 1 q̄ pretium ad saluez p libra ut fiant ambo unus qualitatiꝫ sicut sunt unius gn̄is ut hic ostenditur. et multiplicabis 1/4 7/12 4 p 7/12 20 4 et dunde. p 1 ℔ plib. exibit l' 1/6 8 7/12 20 2 0 regalum. De eodem

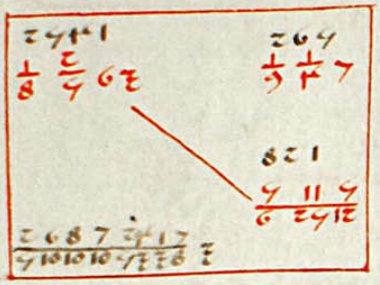


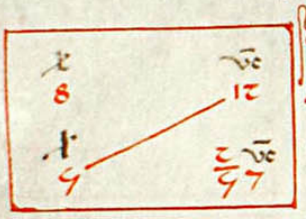


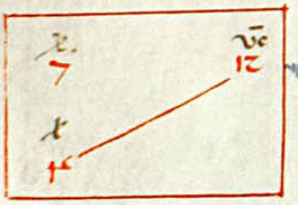












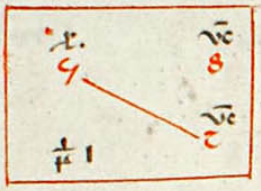
Tenebra argenti uenditur pluribus $\frac{1}{8}\ \frac{2}{7}$ 7 quæritur quantum ua
leant libre 11 unciæ 7 et dñi 3 de eorum. hoc ē lib $\frac{2}{7}\ \frac{7}{12}$ 11 mlt
uplicauī ergo numōs qui sunt eor dñō uidelic $\frac{1}{8}\ \frac{2}{7}$ 7 p $\frac{2}{7}\ \frac{7}{12}$ 11 et di
uidī quenditionem uidelic p 1 exibunt ℔. $\frac{1}{7}\ \frac{6}{10}\ \frac{5}{12}\ \frac{7}{20}$ 87

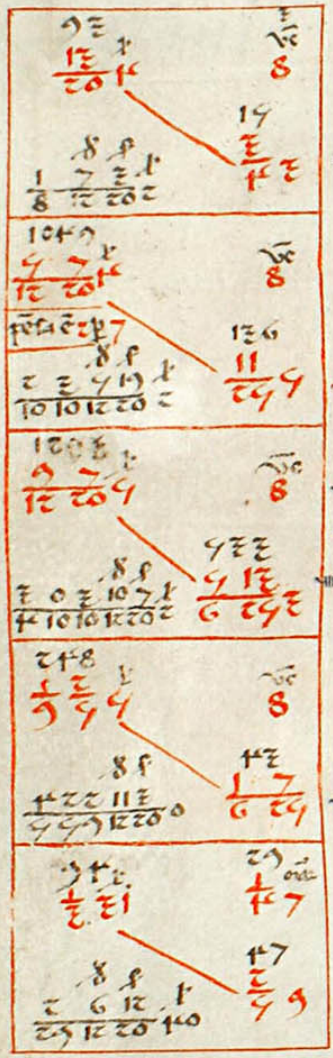
Tem ℔ $\frac{1}{3}\ \frac{1}{4}$ 7 argenti phiganauit sarracenus $\frac{1}{8}\ \frac{2}{7}$ 6 $\frac{2}{7}$ quæritur quã
tum ualeant uē 7 et dnarii 11 d'eorum. et carrubæ 7 hæc est unciæ
$\frac{7}{6}\ \frac{11}{24}$ 7 quia libre $\frac{1}{3}\ \frac{1}{4}$ 7 et unē $\frac{7}{6}\ \frac{11}{24}$ 7 sunt unusquisq; uidelicet ar
genti. et non sunt unus qualibet quia $\frac{1}{3}\ \frac{1}{4}$ 7 sunt lib 7 $\frac{7}{6}\ \frac{11}{24}$ 7
sunt unciæ. uel de libra $\frac{1}{3}\ \frac{1}{4}$ 7 facientes sunt unciæ. uel d uelit
$\frac{7}{6}\ \frac{11}{24}$ 7 facientes sunt partes unius libre que sunt $\frac{7}{6}\ \frac{11}{24}\ \frac{7}{12}$ unius lib
re facile ꝯsequi. ut hic ostenditur. et multabis 7 p una ungula erūt
2 6 7 Jam multiplicabō 6 2 p una ungula erūt 2 7 1 et multabis
7 que sunt sup 12 p una ungula erunt 8 2 1 que multiplicab p 2 7 1
et p 4 et p 3 que sunt sub ungula sib 2 6 7 et dnarii p regulam 2 6 7
7 p omnes alias ruptas ordinando ut habes $\frac{1}{2}\ \frac{0}{8}$ una ungula diuisionis
ꝑ hanc exibūt ℔. $\frac{2}{7}\ \frac{6}{10}\ \frac{8}{10}\ \frac{7}{10}\ \frac{12}{24}\ \frac{1}{12}\ \frac{7}{8}$ 2 De eodem

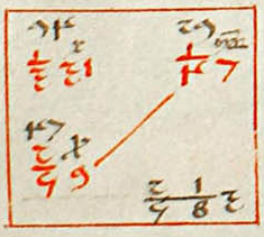
Item si ponatur quod libra argenti hoc ē unciæ 12 ualeat ℔ 8 que
ratur quantum argentum quis habuīt pluribus 7 dñorum. delete 7 sub
8 in questione et multiplica 7 per 12 erunt 60 que diuide p 8 et
exeunt uē $\frac{1}{2}$ 7 ut in questione ostenditur. De eodem

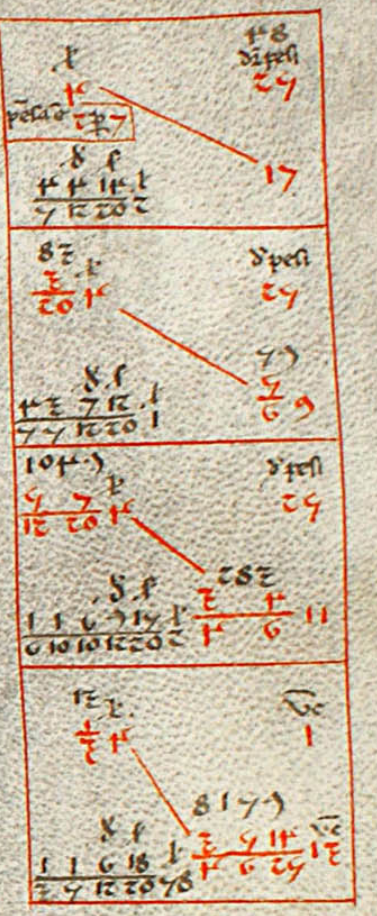
Item libra argenti ualet ℔ 7 quæritur quantum quis in pluribus
℔ habuerit. describatur in qualibet questione multiplicab ℔ p 12 erunt ℔ 8
que diuide p 7 exibunt unciæ $\frac{6}{7}$ 6 Nam si d $\frac{6}{7}$ unius unciæ quot dñi
sunt de centum scire uoluīt. quia ūcia ponitur uē 96 7 multiplicab 6
que sunt sup 7 p 12 7 erunt 1 7 0 que diuide p 7 exibunt dnarii de
centum $\frac{2}{7}$ 12 Jterum si d $\frac{2}{7}$ unius dnarii carrubas facē uoluīt mul
tiplicab 2 que sunt sup 7 p 6 id̃ quia dnarius ē carrubæ 6 erunt
18 que diuide p 7 exibunt carrubæ $\frac{4}{7}$ 2 ergo p ℔ 1 lib. habeb unciæ 6
dnarios 12 et carrubas $\frac{4}{7}$ 2 Nam si hæc facim maiorem magistrum
muna tantum multiplicatione. et diuisione habere uoluerit sup
scripta ℔ 8 mutãs p partes unius unciæ. s. p numerum dñorum. 7 car
rubarum. hoc ē p 12 7 et p 6 erunt 7 2 0 0 que diuide p $\frac{1}{7}\ \frac{0}{6}\ \frac{0}{24}$ hoc ē p
$\frac{1}{7}\ \frac{0}{6}\ \frac{0}{4}\ \frac{0}{4}$ quod ē leuius. et habebis eandem quantitatem ut supius in
questione describitur. que uero sup 7 diuidunt. sunt partes unius carrubæ.
et que sup 6 sunt carrubæ. 7 que sup $\frac{1}{7}\ \frac{0}{7}$ sunt dnarii de centum. 7 que
cetera ungulam sunt unciæ. scias sunt ille 12 uendi nomi. sub quibus de
scribuntur. quia semp qualis fuit numerus ingrē et in qualitate sub
quo summa exactis describitur. talis erit et ille qui sub ipō describitur. Et id̃

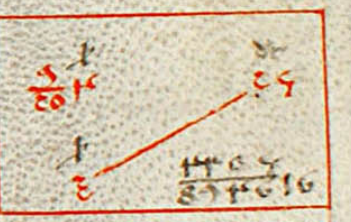
cepto numero sub quo summa ponenda ē. s. quartus numerus signatus.
comprehendēs ea que in capite ungule diuisione habere debens. ut
si fuit libre valentium eaque sup nacuum scabunt studeb habē $\frac{1}{12}\ \frac{0}{20}$ pp
solidos ē denarios que si fuit $\frac{1}{2}$ studebis habē $\frac{1}{12}$ ppē denarios. Et si tarentaq
studebis habere $\frac{1}{20}$ ppter grana. Et si unc bizante sarracenatu. uel yyperu.
studebis habere $\frac{1}{2}\ \frac{0}{8}$ Et si bizantū d garbo studebis habere $\frac{1}{10}$ et si fuit b.
ut totali alicuius mensi si multitudo eam ut pipis studebis habē $\frac{1}{12}$ ppter
unciaſ et si fuit libre plane alicuius mensis ancois ut zaffarum studeb
habere $\frac{1}{4}\ \frac{0}{4}\ \frac{0}{12}$ ppter unciaſ et denarios d cantem. q si fuit libre eusdem
ponderis alicuius mensis auricalci uu argē studebis habere $\frac{1}{6}\ \frac{0}{4}\ \frac{0}{4}\ \frac{0}{12}$ ppē unciaſ
d grana et carrubaſ. et si fuit libre auricalci tu ut eum studebis habere
$\frac{1}{4}\ \frac{0}{6}\ \frac{0}{4}\ \frac{0}{4}\ \frac{0}{12}$ ppter unciaſ et denarios et carrubaſ. et grana. et si fuerint
unciae cum plane libre studebis habere $\frac{1}{4}\ \frac{0}{6}\ \frac{0}{4}\ \frac{0}{4}$ propter dēros d can
tra et carrubaſ. et grana. et si fuit denarii de cantra cum studebis ha
bere tantum $\frac{1}{4}\ \frac{0}{6}$ ppē carrubaſ et grana. Et si fuit unc libre cum uel
alicuius alterius auricalci studebis habere tm $\frac{1}{4}$ in ungula ppē grana q si fuer
int unciae argenti fuerint ut habeas tantum $\frac{1}{6}\ \frac{0}{4}\ \frac{0}{4}$ ppter denarios et
carrubaſ. ut in precepta questione ordinauimus. Et si fuit denarii
d cantra argentum si fuerint ut habeas tantum $\frac{1}{6}$ propter carrubaſ. et si
fuerint marce argenti studebis habere $\frac{1}{6}\ \frac{0}{4}\ \frac{0}{4}\ \frac{0}{8}$ ppter unciaſ ē denarios
et carrubaſ. q sic debet fieri d omnibus aliis rebus secundum diuisionem
ponderum et partium comm. et secundum consuetudinem et ordi
nem illarum gentium in quibus hec operationes fiunt. Videlicet
quod debeamus ē optime considerare si habeas in una multiplicatione
et in una diuisione hoc quod habere desiderabas. Et si non quaeras
et ne tradaſ oblivioni scribas. que quantitatis habuisti in diuisione
capite uel capitibus precepti numeri. cum quo in capite un
gularum ponere et in margine. et commisce eum. ut eos cum his
que desiderabas habere in una multiplicatione cum eisdem. Verbi
gratia ponamus quod oporteat te habere $\frac{1}{12}$ in capite ungule
ppē denarios. uel unciaſ. q debebis facere $\frac{1}{4}$ in diuisione minuta. ergo tibi
$\frac{1}{2}$ quas commisces in simul facient tibi $\frac{1}{12}$ quam habebis in capi
te ungule. et multiplicabis totam summam $\frac{1}{2}$ propter $\frac{1}{2}$ que
minuta tibi. Iam sic ex diuisione inquā diuidere volueris rebus
totum hoc quod in capite ungule tibi necessarium fuerit compre
hendere poterit. studebis illud comprehendē. et pone illud in capi
te ungule. Verbi gratia. oportet nos habē $\frac{1}{12}\ \frac{0}{20}$ ppē solidos
et denarios q debemus diuidere summam $\frac{1}{2}\ \frac{0}{6}\ \frac{0}{8}\ \frac{0}{2}\ \frac{0}{10}$ q nulla
q $\frac{1}{2}$ ai $\frac{1}{10}$ q facient tibi $\frac{1}{20}$ qui commisceā $\frac{1}{6}$ et $\frac{1}{8}$ q facient tibi $\frac{1}{4}\ \frac{0}{12}$

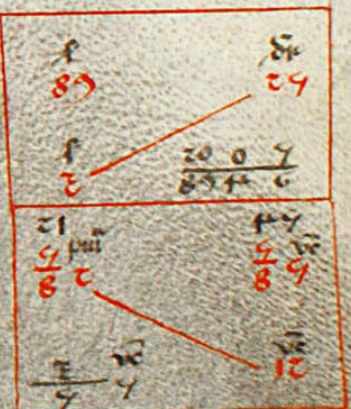












Incipit pars tertia octaui capitli de uendicione cannarum et primum de canna pisana

Canna pisana est palmorum 10 uel brachiorum 4 canna autem Janue ut dicitur est palmorum 9 canna autem pruncie et sicilie et [illegible] unum mensure palmorum 8 et nos pro uendicione pisane canne dicamus. **De canna**

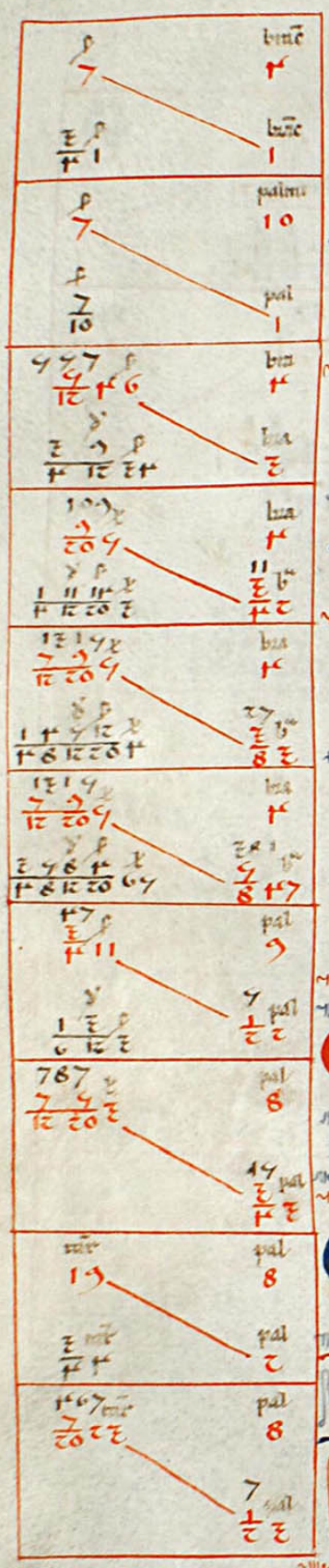
Si canna pisana que brachia 4 cuiuslibet palmi uendatur pro 7 et quantum quantum ualet brachium 1 describe quomodo ut [illegible] multiplicando 7 per 1 et diuide per 4 exibit $\frac{3}{4}$ 1 hec dicitur 21 [illegible] unum palmum [illegible] 10 [illegible] brachia 4 [illegible] canna [illegible] ut sicut [illegible] hec

[illegible] canna [illegible] palmus [illegible] canna [illegible] sic describas [illegible] palmus [illegible] canna [illegible] hec

[illegible] canna [illegible] 46 [illegible] 5 hec [illegible] $\frac{5}{12}$ 46 quantum ualet [illegible] brachia 3 [illegible] 46 per 12 [illegible] 5 [illegible] 557 [illegible] multiplicando per 3 et diuide per 4 [illegible] per 12 [illegible] hec est per $\frac{1}{4}\frac{0}{12}$ [illegible] canna [illegible] $\frac{9}{20}$ 5 [illegible] quantum ualeat brachia $\frac{1}{4}\frac{2}{2}$ [illegible] **De eodem** $\frac{3}{4}\frac{9}{12}$ 3 [illegible] brachia $\frac{3}{4}$ 2 [illegible] multiplicando [illegible] $\frac{9}{20}$ 5 et diuide per 4 hec multiplicando 11 per 10 [illegible] 1199 [illegible] 4 [illegible] per 20 [illegible] $\frac{1}{12}$ [illegible] $\frac{1}{20}$ sub [illegible] 1199 per 3 [illegible] 3597 [illegible] diuides per $\frac{1}{4}\frac{0}{12}\frac{0}{20}$ [illegible] $\frac{1}{4}\frac{11}{12}\frac{14}{20}$ 3 **De eodem** [illegible] $\frac{7}{12}\frac{9}{20}$ 5 [illegible] quantum ualeat brachia $\frac{1}{8}\frac{1}{4}$ 3 hec brachia $\frac{3}{8}$ 3 [illegible] 5 [illegible] 1315 [illegible] multiplicando 3 [illegible] 27 [illegible] multiplicando per 1315 et diuide per [illegible] $\frac{1}{4}\frac{4}{8}\frac{5}{12}\frac{12}{20}$ 4

[illegible] canna [illegible] $\frac{7}{12}\frac{9}{20}$ 5 [illegible] quantum ualeat canne 11 et brachia $\frac{1}{8}\frac{1}{2}$ 3 hec canne $\frac{3}{8}$ 11 [illegible] $\frac{29}{32}$ 11 [illegible] canne [illegible] brachia [illegible] 4 [illegible] canna [illegible] brachia 4 [illegible] canne [illegible] 11 [illegible] $\frac{1}{8}\frac{1}{2}$ 3 [illegible] brachia. [illegible] brachia $\frac{5}{8}$ 4 7 [illegible] sub [illegible] 4 [illegible] $\frac{5}{8}$ 47 et $\frac{7}{12}\frac{9}{20}$ 5 et diuides per 4 [illegible] $\frac{3}{4}\frac{5}{8}\frac{8}{12}\frac{4}{20}$ 65 [illegible] **De canna Janue** [illegible] palmi 9 [illegible] per $\frac{3}{4}$ 11 [illegible] 9 hec [illegible] $\frac{3}{4}$ 11 [illegible] quantum ualeat [illegible] palmi $\frac{1}{2}$ 2 [illegible] per $\frac{3}{4}$ 11 [illegible] 9 [illegible] $\frac{1}{6}\frac{3}{12}$ 3 [illegible] quot [illegible] ualet palmi. **De canna pruncie**

Canna pruncie que palmi 8 [illegible] $\frac{7}{12}\frac{5}{20}$ 3 [illegible] quantum ualeat palmi $\frac{1}{9}\frac{3}{4}$ 3 [illegible] $\frac{1}{9}\frac{3}{4}$ 3 per $\frac{7}{12}\frac{5}{20}$ 3 [illegible] per 8 ordinans $\frac{1}{12}\frac{0}{20}$ [illegible] $\frac{7}{12}\frac{5}{20}$ 3 [illegible] $\frac{1}{4}\frac{4}{8}\frac{7}{9}\frac{7}{12}\frac{11}{20}$ 1 [illegible] canna [illegible] palmi [illegible] 14 [illegible] 21 **De canna cicilie**



Canna [illegible] palmi 8 [illegible] tarenis 19 [illegible] quantum ualeat palmi 2 [illegible] per 8 [illegible] tarenis $\frac{3}{4}$ 4 [illegible] palmi 2 [illegible] palmi 8 [illegible] tarenis 19 [illegible] tarenis $\frac{3}{4}$ 4 [illegible] **De eodem**

[illegible] canna [illegible] tarenis 2 3 [illegible] tarenis $\frac{7}{20}$ 2 3 [illegible] quantum ualeat palmi $\frac{1}{2}$ 3 [illegible] $\frac{1}{2}$ 3 per $\frac{7}{20}$ 2 3 [illegible] per 8 [illegible] $\frac{1}{2}\frac{2}{8}\frac{4}{20}$ 10 hec [illegible] 10 [illegible] $\frac{1}{2}\frac{2}{8}$ 4 **De eodem** [illegible] canna [illegible] $\frac{1}{4}$ 24 [illegible] canne [illegible] 7 [illegible] palmi $\frac{1}{4}$ 4 hec canne $\frac{1}{4}\frac{4}{8}$ 7 [illegible] 24 [illegible] 101 [illegible] multiplicando 101 per 20 [illegible] 2020 [illegible] $\frac{1}{4}\frac{0}{4}\frac{0}{8}$ [illegible] $\frac{1}{4}$ 24 [illegible] $\frac{1}{20}$ [illegible] $\frac{1}{20}$ [illegible] $\frac{1}{4}\frac{0}{4}\frac{0}{8}$ [illegible]

7	brac 4
$\frac{3}{4}$ 1	brac 1
7	palmi 10
$\frac{7}{10}$	pal 1
$\frac{5}{12}$ 46	bra 4
$\frac{3}{4}\frac{9}{12}$ 34	bra 3
$\frac{9}{20}$ 5	bra 4
$\frac{1}{4}\frac{11}{12}\frac{14}{20}$ 3	$\frac{3}{4}$ 11 bra 2
$\frac{7}{12}\frac{9}{20}$ 5	bra 4
$\frac{1}{4}\frac{4}{8}\frac{5}{12}\frac{12}{20}$ 4	$\frac{3}{8}$ 27 bra 3
$\frac{7}{12}\frac{9}{20}$ 5	bra 4
$\frac{3}{4}\frac{5}{8}\frac{8}{12}\frac{4}{20}$ 65	$\frac{5}{8}$ 47 bra 3
$\frac{3}{4}$ 11	pal 9
$\frac{1}{6}\frac{3}{12}$ 3	$\frac{1}{2}$ 2 pal 5
$\frac{7}{12}\frac{5}{20}$ 3	pal 8
	$\frac{3}{4}$ 3 pal 14
19	pal 8
$\frac{3}{4}$ 4	pal 2
$\frac{7}{20}$ 23	pal 8
	$\frac{1}{2}$ 3 pal 7

qr minuit nob 1/4 ex ipa 1/20 unde describe in qcte 4 sr 1 ut melius habet memorie cum probavis 7
mlt 3 1 9 0 9 p 4 7 diuid p 1/4 0/8 0/20 exibit tar 1/4 3/8 16/20 24 3 h tar 24 3 7 gna 1/4 3/8 16 De cam

Canna garbi q e sit palmi 8 uendit pbizantis 4 7 miliarensibus 7 h e pbizantis 7/10 4 garbi
7 qrat quantu ualeat palmi 1/4 2 describes qcez sic 7 mlt 1/4 2 p 7/10 4 7 diuides p 8 exibit
3/4 1/8 3/10 1 ut in qcte ostenditur. h e biz 1 7 miliar 3/4 1/8 3 De eode

Item eadem canna uendit pbiz 3/4 4 7 qrat qntu ualeat canne 1/2 11 describe qcez sic 7 mlt 4
p 4 7 adde 3 er 23 q pce sr 3/4 4 7 mlt ictu 11 p sua uglaz er 23 7 mlt 23 p 23 er 429
q diuid p ruptos. uidel. p 1/2 0/4 h e p 8 7 p 1 cui diuisio cum mch oportet computanda n e
exibit biz 1/8 66 d q 1/8 similiar facem uis mlta 1 d e sr 8 p 10 io qr biz 1 e miliar 10
er 10 q diuid p 8 exibit mlt 1/4 1 ul alr qr loc in q ponenda e suma e sub biz garbi
oportet nos hic 1/10 in capite uigule pp mlt. qr mlta 429 p 10 h e d an pces eis 0 erunt
4290 q diuid p 1/8 0/10 exibit biz 1/4 1/20 6 ut supi ut ita in qcte demonstrat. Et sm h d di
cimus d canna garbi poces intelligere d oibz rebz q i eadem regione uendunt p eosdem bizantios.

Item eadem canna uendit pbiz 4 7 karatis 13 h e pbiz 13/24 4 7 qrat qntu ualeat De eode
canne 7 palmi 3 h e canne 3/8 7 describe qcez sic 7 mlta 13/24 4 p 3/8 7 7 diuid p 1 exibit 7
7 2 3/8 3 3 3 3

De balla fustaneorum

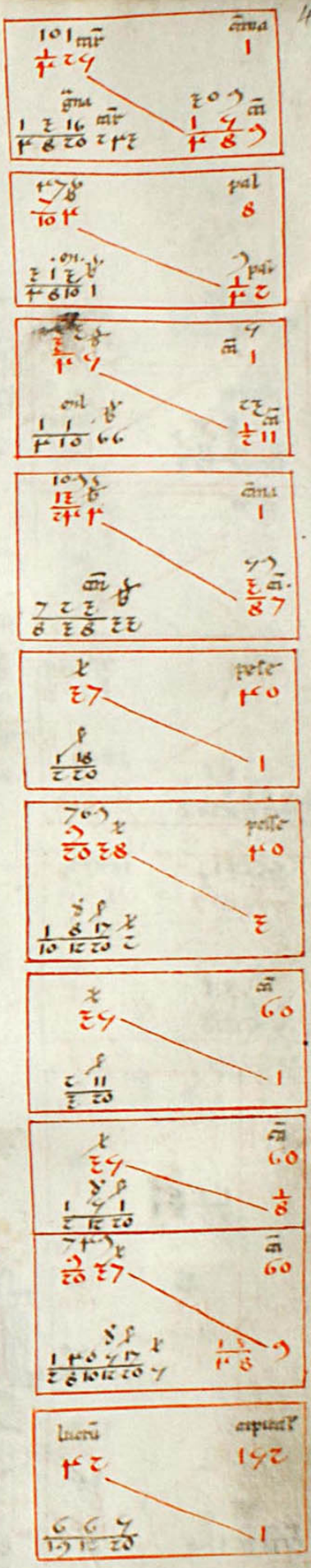
Balla fustanorum q e petiarum 40 uendit pliz 37 7 qrat qntu ualeat petia una describe qcez
sic 7 mlta 1 p 37 er 37 q diuid p reglaz d 40 s. p 1/4 0/10 ul p 1/2 0/20 d e meli h. io qr loc in
q ponenda e suma e sub libz uidel. sub 37 exibit 1/2 18/20 h e sol 1/2 18 Et ex h qd manifestum e q
qt lib fuit in medietate pcu balle. tot sol ualz petia una.

Item balla uendit pliz 7/20 38 7 qrat quantu ualeat pene 3 describe qcez sic 7 mlta 38 p sua
uglaz er 769 q mlt p 3 q st eis ex aduerso er 2307 q diuid p reglaz d 40 7 p 20 q s sub
uglaz. h e 1/4 0/10 0/20 sz pu mlta 2307 p 3 q minuit nob d 1/12 quam debemus hic mu
glaz p 20 er 6921 q diuid p 1/10 0/12 0/20 exibit 1/10 8/12 17/20 2 De torsello

Si torsellus q e canne 60 pruincie. h e d palmis 8 uendit pliz 34 7 qrat qntu ualeat cana
una. describe qcez 7 mlta 1 p 34 7 diuid p r d 60 q e 1/6 0/10 ul 1/3 0/20 d e meli h io qr indigemus hic
1/20 i capite uirgule exibit 2/3 11/20 h e sol 11 7 di 8 Et ex h qd manifestum e q qt fuit lib p
tu torsellu. tot tertias uni s. ualet canna una De eodem

Item si eadem rcte qres qntu ualeat palmi. facies d palmo pte uni canne cum q 1/8 describe g qcez sic
7 mlt 1 d e sr 8 p 34 er 34 q diuid p 60 7 p 8 q s sub uglaz capitis ea sic 1/2 0/12 0/20 exibit
1/2 4/12 1/20 h e dra 1/2 17 Ex h g manifestum e qr qt. l. ualz torsellus tot obulos ualz palmi.
Item torsellus uendit pliz 9/20 37 7 qrat qntu ualeat canne 9 7 palmi 1/4 3 h e canne 1/4 3/8 9
describe qcez sic 7 mlt 1/4 3/8 9 p 9/20 37 7 diuides p 60 exibit lib. 1/2 4/8 0/10 5/12 17/20 4 ut in qcte ostendi.

Quam uis in decimo huius libri capitulo qlit lucrum enticarum inter socios diuidendum De societatibus
sit. debeamus ostendere. Tamen qlit hoc id sm ftm negotiandi modum fieri debeat ad psens uolumus
demonstrare. ut h dupliciter demonstrato pruptiores audientium animos reddat. Proponimus h tamen
quodam q habuit in sua hentica lib 142 cum qbz lucratus fuit lib 46 Et qrit qt ex ipso lucro
unicuique socioru suoru p libram reddere debeat. Primum qdem sm pisanam consuetudinem d sto lucro
quantam pte debemus auferre cum ipa sit tertiatorius remanet lib 42 Qr describe in qcte d lib 142
capitalis lucrato fuerit lib 42 7 pcez 1 uidel. libram sub 142 ut in hac qcte demonstratur.
Et mlt nuos q st ex aduerso. s. 1 p 42 er 42 q debes diuidere p reglaz d 142 que est



$\frac{1}{8}\frac{0}{19}$ s; ut hic $\frac{1}{12}\frac{0}{20}$ in capite ugle. multa summa. s. 42 p 30 pp tgesima q minuit nob
d ipo $\frac{1}{12}\frac{0}{20}$ er 1260 q diuid p $\frac{1}{19}\frac{0}{12}\frac{0}{20}$ exibit $\frac{6}{19}\frac{6}{12}\frac{7}{20}$ h e s. 4 7 dri 6 7 fere tertia uni dri
pate. ut alr. sm uulgare modu repta r d 152 q e $\frac{1}{8}\frac{0}{19}$ diuides lucru uidel. l. 42 p 8
exibit lib 4 7 s 4 q st sol 104 quos diuid p 19 exibit. s. 4 7 dri $\frac{6}{19}$ 6 ut pdixim.

Nam si sta rone inuenire uolueris qd euenit d ipo lucro ei q. l. 13 in ipa huit entica
sic facies. multa 13 p portione lucri uni lib. s. p. s. 4 7 dri $\frac{6}{19}$ 6 q multo sm uulgare modu
sic fit. mt. primu 13 p. s. 4 er s. 64 cu qbz add multone d dris 6 in 13 h e s. 6 7 dr 6 er l. 3
7 s. 11 7 dr 6 Cu qbz itm add multone d $\frac{6}{19}$ in 13 h e dr $\frac{2}{19}$ 4 er l. 3 7 s. 11 7 dri $\frac{2}{19}$ 10

Etiam si h id sm arte repire dsidaris dscbes qoez ut h ostedit. 7 mt 13 p 42 q st exaduso
er 546 q diuid p $\frac{1}{8}\frac{0}{19}$ s; ut hic $\frac{1}{12}\frac{0}{20}$ in capite ugle mt. 546 p 30 7 diuides summa p
$\frac{1}{19}\frac{0}{12}\frac{0}{20}$ exibit. l. $\frac{2}{19}\frac{10}{12}\frac{11}{20}$ 3 ut supius p uulgare modu inuenimus. De eodem

Item qda huit in hentica. l. $\frac{1}{2}$ 243 cu qbz lucrat fuit ult suu qrtu pficiu. l. $\frac{11}{20}$ 63
qritur qd p libra unicuq sociorum suoz redde debeat dscbe qoez 7 multa 1 p $\frac{11}{20}$ 63 t
diuid p $\frac{1}{2}$ 243 h e mlb 1 p 1271 q p 2 q s sub ugla p 243 er 2442 q diuid p 40 7
p 20 tam multa pius 2442 p 4 ut hic $\frac{1}{12}$ p $\frac{1}{20}$ in diuisione exibit $\frac{2}{13}\frac{2}{13}\frac{0}{12}\frac{4}{20}$
h e s. 4 7 parum minus d $\frac{1}{6}$ unius dri. De eodem

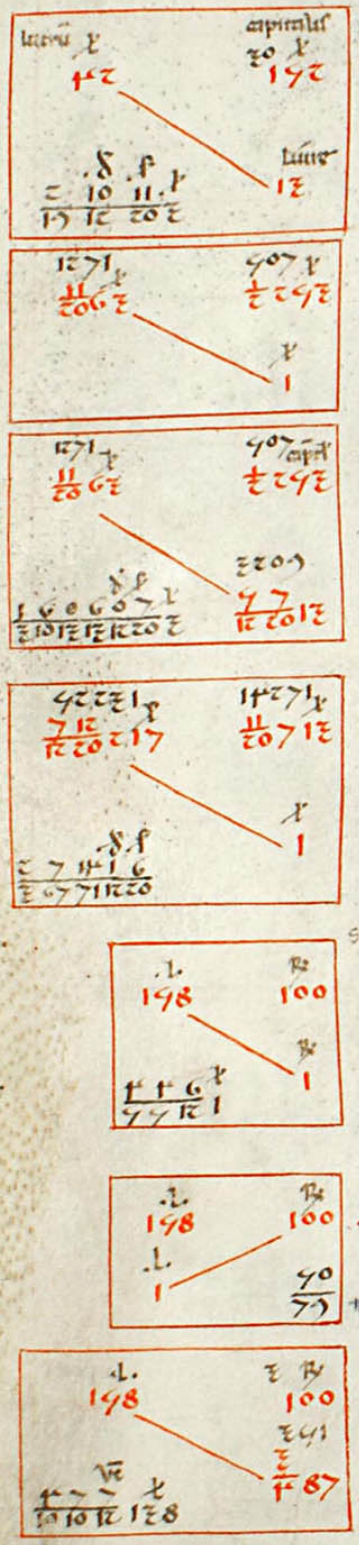
Et si h q accidit d supscripto pficiu audi q in sta hentica huit. l. $\frac{5}{12}\frac{7}{20}$ 13 scire uolueris
dscbe qoez. Et mlb. l. 13 psua ugla er 3209 q multa p 1271 q p 2 q st sub ugula
7 diuid summa p 407 7 p os ruptos reliquoz duoz nuoz tn eintab in q n mlb p 2 ut
n diuidas p 2 q s i regla d 20 exibit. lib. $\frac{1}{3}\frac{6}{10}\frac{0}{13}\frac{6}{13}\frac{0}{12}\frac{7}{20}$ 3 De eodem

Item quida huit in hentica. lib. $\frac{11}{20}$ 713 cu qbz lucratus fuit ult suu qrtu pficiu
lib $\frac{7}{12}\frac{12}{20}$ 217 7 qrat itm qd d ipo lucro p uara quaq lib ctigit. dscbe qoez 7 multa
1 p 42231 q p 20 q s sub ugla p 713 7 diuid summa p regla d 14271 q e $\frac{1}{6}\frac{0}{7}\frac{0}{7}\frac{1}{1}$
7 p 12 7 p 20 q st sub uirgla lucri exibit $\frac{2}{3}\frac{7}{6}\frac{14}{7}\frac{1}{1}\frac{6}{12}\frac{}{20}$ h e sol 6 7 fere dri $\frac{1}{2}$ 1 sic
potis face d quolibz lucro siue tarenoz sit. siue quorulibz bizantiorum. Etia 7 si ppo
nere qda huisse d qntislibz bizantis libras qntaslibz driorum ut ecot 7 qreret quot
ex driis cadit unicuq bizantio. Incipit pars quarta octaui capitli i reuersione uni

Siuis scire d qt uis rx. pisam cantani gnis ad Rotulos albius
quot libre subtiles sint ut dicam d rx. 1 adiscas pri exeis in q ppor
tione sint. sut e in tali pportione. uidel q rx. 100 s. cat. sut libre 148
uni dscbe in qoe rx. 100 puenditione 7 libras 148 pptio. 7 rx. 1 d q uis
face libras. dscbes sub rx. uidel. sub 100 ut in hac qoe ostedit. 7 mt 1 p 148 7 diuid p
100 h e tplu d 148 diuid p tplu d 100 7 h facies ut hic $\frac{1}{12}$ in capite uge pp uncias
exibit. l. $\frac{4}{4}\frac{4}{4}\frac{6}{12}$ 1 h e. l. 1 7 uc 7 min $\frac{1}{24}$ De reuersione libre pisane in partes uni rx.

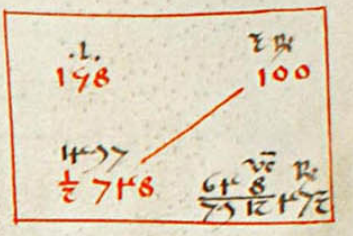
Rursu si d libra una partes uni rx. face uolueris dscbes 1 sub 148 ut in hac alia qoe
dscbet. 7 mlb 1 p 100 er 100 q diuides p 148 er $\frac{50}{79}$ uni rx. d qbz si uceas. rx. face uo
lueris multa 50 p unceas uni rx. uidel. p 12 q sic libra e uc 12 ita rotl. e uc 12 tm st
maiores erunt 600 que diuid p 79 exibit uc $\frac{47}{79}$ 7 d rx.

Item si d rx $\frac{3}{4}$ 87 libras face uolueris. dscbe itaq rx. sub rotul. h e $\frac{3}{4}$ 87 sub 100 7 mt
87 p 4 7 adde 3 er 341 q mt p 148 er 44448 q diuides p 100 7 p 4 h e p $\frac{1}{4}\frac{0}{10}\frac{0}{10}$ ut

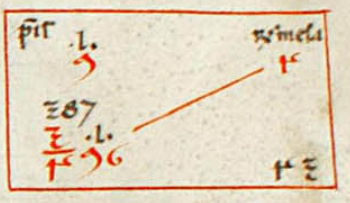


Turbul ℔ in ungla duncion pp ũcaal. mlt 4 4 ℈ 8 ℔ ℥ 7 duudes p 1/10 0/10 0/12 eq
1/10 7/10 7/12 ℈ 8 ut in qõe ostenditur. D libris ad ℔.

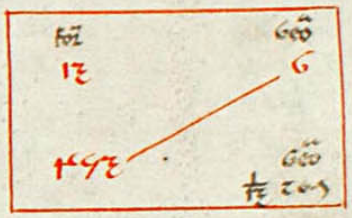
Item li d libus 1/2 7 ℈ 8 ℔ fac uoluis. dlebeg libras. sub libs. b ẽ 1/2 7 ℈ 8 sub 7 ℈ 8
mlt 1/2 7 ℈ 8 p 100 7 duud p ℈ 8 tõ mlt. sũma dicta ℔ ut big 1/12 in ungla duncion
pp ũcaal. erabt ℔. 6 ℈ 8/7 9 12 ℈ 7 ℥ ut in questione ostenditur.



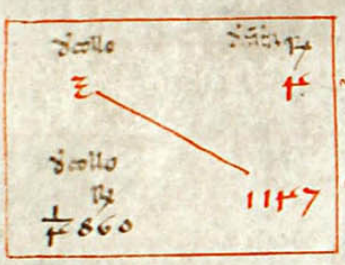
Item li d ℔ ℈ 7 d cantare mellane libral pisanal fac uoluis. ad dscal pũ mq
portõe st. ℔. mellane ad libral pisanal. 9 uẽ ẽ in tali ppõe. ut ẽdo dq ℔ 1 mag
lane ẽ libre 1/12 pisane. g q̃ tuor ℔. mellane st libre 7 pisane. dui dlebe qõg ut
p ostendit. 7 mlta 7 ℔ ℥ 2 q̃ 3 exadiso 7 duud ℔ erabt lib. D libral pis ad ℔ mel
ẽ li cont d libs 7/12 7 6 ℔. mellane fac uoluit dlebel libral sub libris sane
videl 7/12 7 6 sub 7 ut in hac alia cint dlepte. 7 mlt 7/12 6 ℔ q̃ 3 exadiso. 7 ℔
duud p 7 erabt ℔. 12 ℥ 7 sic pot d omib; sub; fac. De ℔. ger ad for
Rsus li ap alexandria d ℔. 24 7 Gerounus ℔ los forfonnos fac uoluit adulsa
pũ mq ppõe 3 ℔. Gerounum ad ℔. forfonng. s ẽ ẽ in tali ppõe. dq ℔. 1 Gero.
ẽ ℥ 1/12 forfonm. g ℔. 6 Gerounum st ℔ 12 forfoꝛ. 7 sic eog dlebel mqe. 7 poq ℔.
24 7 Gere. sub ℔. 6 Ge. ut h ostẽdit. 7 mlta 12 ℔ 24 7 duud ℥ 6 erabt ℔. forfoꝛ.
5/6 7 4 1 ut in questione ostendit. Hec aũ cantara 7 foꝛ. 7 d ℔ 4 1 7 uc 10 qua
℔. foꝛ. ẽ uc 12 quazũ una queq; ponditur muliarẽles 12 d alexandria. 7 unus q̃lq;
℔ Gere. ẽ simlit uc 12 quazũ una queq; ponderat muliarenses 6 erdicat im
liarẽlib; qui muliarenses ponderant kantos 16 qui kantos ponderat alius
12 s. grana.

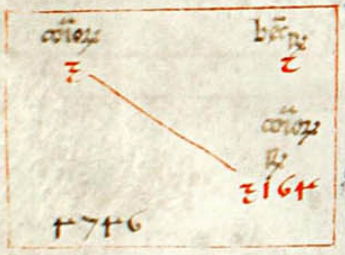


De forforis d Ger
Item li de ℔. foꝛ 4 4 7 ℥ ℔. Ger facere uoluerit dlebel furfurmos. sub fur. b ẽ
4 4 7 sub 12 et mlt 6 ℔ 4 4 7 q̃ sunt exadiso. 7 duud p 12 erabunt ℔ 1/2 10 7
ut in hac delcriptione ostenditur.



Rsum li d notulis. Gerounus 1/9 1/4 1/2 12 forfonng facere uoluerit dlebe Gero
unos sub gerounis. b ẽ 1/9 1/4 1/2 12 sub 6 7 mlta 12 ℔ sua ugulas et 1 4 12 7 q̃
multa p 12 7 duud p 6 q̃ p ruptg eis suus mlta sũmam ℥ ut habeg 1/12 0/12
ungla pp ũcaal 7 muliarẽles. erabt ℔. foꝛ 5/9 4 6/12 12 4 1 b ẽ ℔ 4 1 7 uc 6 7 mlt 5/9 4
Item si pleptos. ℔. 1/9 1/4 1/2 12 foꝛ. foꝛe ꝑsoluens 7 exeas De forfoꝛ a Ger
℔. Gero. facere uoluit. delcribet 1/9 1/4 1/2 12 sub 12 7 mlta nũm ꝑonũ. sat.
1 4 12 7 ℥ 6 7 duud sũmam p 12 7 p ruptg b ẽ p 1/9 0/12 0/12 et hebis ꝑsolutum.
Tam suus habere muliarenses post uncial in ungla. mlta sũmam ℥ 7 di
uidel p 1/9 0/12 0/12 7 q̃ sup 12 euenit. erunt uc. 7 q̃ sup 1/12 0/12 7 que sup
nũt cuiꝰ muliarenses. io q2 uc ut dixim ẽ mlt 12 quorum regla ẽ 1/12 0/12
erabt ℔. 1/9 0/12 2 11/12 10 ut in qõe ostenditur. Hec ẽ ℔ 10 7 uc 11 7 mlt 1/9 18
q̃ mulcandu sunt 7 que sunt sup 12 ℥ que sunt p 12 7 addendũ zephyro qd
ẽ sup 12 7 sic h̃ntur mlt 18 ut modo diximus. 7 sic sm pleptam matiã
pot quoslibz ponderos. ut cantara in quolibz notul. ut cantarus redigẽ. sibiũ
notul ꝑportionũ alloꝝ. h ẽ qualit se hũnt ad mucõ. Et h mod ẽ utl mul
tum in boneratione nauiũ. aũ honẽt duplis mcabz q̃ h̃t modũ sm dupli





ma in portus et locandam. ul' ginuensem uel alium ut naues que honerãt
in garbo. que honerantur ad cassw corozum. Vñ cum in pis ponderentur
duisse merces. ginuenses et leuenses quam cetera q habeant in mole glo
bum q maiorem. Vñ ab antiquis talis fuit ordinatio quod de alume q
ponunt in fundo nauis ponunt duo cantara pisano corozagi. d'beccunus
lo qua sunt leuenses cozus ponunt duo cantara p tribz d'conlus. ut de
sucaro. ponunt unum cantare p dualz d'cozus. Silit naues que honerãt
apud sardiniã. honerantur ad pondus colli. qui collus pt habere mse pz 100
q ponunt d'mne tã cantara in uno collo. d'corone ponunt cãt ℥1 in collo.
Et naues que honerantur apud alexandriam. honerant asportatas pipe
que sparte ponitur silit pz 100 Ad quam sportatam reducantur merces
sm diuisitatem illarum. ad quas tam ordinationes quas dicã necesse ñe
qua unus quisq; cum ea necessaria fuerit poterit inde mutuare. Nam
quas q alias reductiones ponderum secundum diuisitatem merciũ p
scriptarum. p presentiam declarabimus. Quasdam in hoc opere posi
tiones ponamus. De coronis reductione ad collũ sardinie cantaz in garbo

Quis apud sardiniam habeat in quadam naui honerantem centaria 11 qx
corones et uoluerit eos ad colla redigere quia cantare ℥1 coronas
reducimus d'collum unum. q quattuor cantara coronas sunt colla z
q quattuor pz coronas sunt pz z de collo. dicimus in questione cantaria 11
ℓ7 hoc est pz 11ℓ7 sub pz ℓ coronis q multiplicab 11ℓ7 pz z duabz
ℓ et habunt pz ℓ860 d'collo. ut in descriptione ostenditur. hoc est colla
8 q ℓ60 de collo. De beccunaz reductione ad cãt cantaz in garbo.

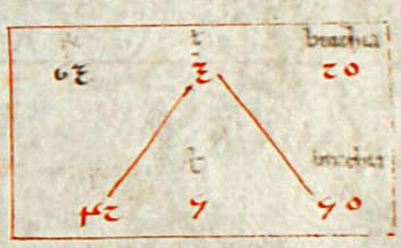
Bisum si apud bugiam uel septam quis in quadam naui habuerit cen
tum hoccunaum ℥1 q rotuli 6ℓ et uoluerit eos redigere ad corozum
centum quia centum duo beccunaum ut diximus sunt cantara z d
corozum ergo co rotuli z beccunaum sunt rotuli z corozum. Quare
dicimus centum ℥1 de rotuli 6ℓ hoc est z 16ℓ sub rotulis z hoc
centum. q multiplicabz z pz 16ℓ que sunt ex duo. et habunt pz
ℓ7ℓ6 ut in descriptione ostenditur. hoc d cantara ℓ7
rotuli ℓ6 Vel aliter. accipe medietatem de centum ℥1 et rotuli
6ℓ pz eosdem centaz ℓ7 q rotuli ℓ6 centum similiter cantara ℓ7
et rotuli ℓ6 ut modo nos fecimus. et sic potest intelligere de quali
bet sit diuisi. Unde nos huic tractatui capitulo finem imponimus.
ut ad nonum faciamus transitionem.

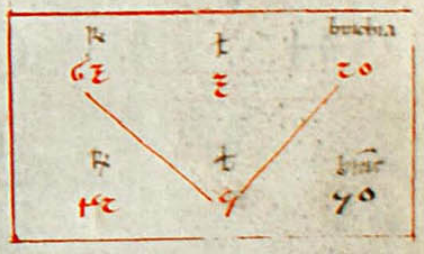
Incipit capitulum nonũ de barrettis merciaum atq; eaz filium

[illegible] linum

Regula universalis in baractis mercium primum de pipere ad

[illegible]

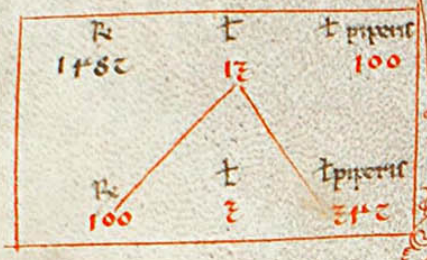




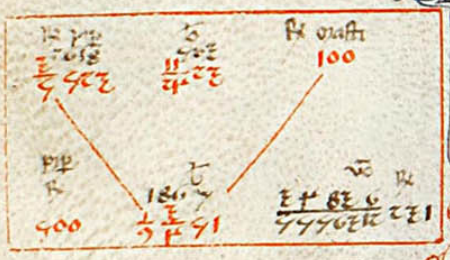
Ita p 126 hec est multa 63 p 4 que sunt eis ex adverso quorum summa duc in 20 que sunt eis de 4 tamen ex adverso de totum dividit per reliquos duos numeros. s. p 3 et p 42 veniet brachia 40 que pone sub brachiis 20

De pipere ad cuminum

Centum piperis valet l. 13 et cum cimini valet l. 3 queritur quot re cimini habebuntur pro l. 342 de scripta questione per supradictam invenies numerum prime mercis esse ad numerum secunde sicut centuplum trium ad centuplum de 13 et quia est sicut totum ad totum ita pars ad partem. erit ergo sicut centesima centupli trium ad centesimam centupli de 13 hec est sicut 3 sunt 13 ita numerus prime ad numerum secunde. Et ex hoc quod manifestum est quod quando duarum mercium diversarum numerus vel editionis est idem. tunc est sicut numerus pretii secunde ad numerum pretii prime ita numerus prime mercis est ad numerum secunde. Quare multiplicabo 342 in hac questione per 13 et dividendo per 3 exibit re 1482 cimini quos pone in questione sub re 100 vel secundum modum huius artis multiplicandi 342 per 13 que sunt eis ex adverso de totum per 100 cimini quorum trium multiplicatorum numerorum summa est per 3 et per 100 dividenda. Unde si reliquum quantum 100 ad numerum partis remanebit tamen multiplicatio de 342 in 13 dividenda per 3 ut supra operati fuimus. Et si de re 342 cimini piper habere vis pone 342 sub 100 cimini et multiplica ea per 3 que totum per 100 piperis et dividendo summa per 100 cimini et per 13 tamen evita 100 ex his hec est multiplicatio 342 per 3 et dividendo per 13 exibit piperis l. $\frac{12}{13}$ 78 quos pone sub libris 100 piperis



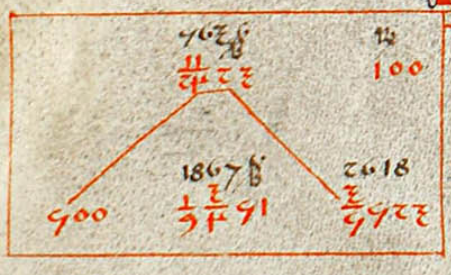
Rursum cantat. Gero. masticis videtur alexandrie l. $\frac{11}{24}$ 23 et carica piperis que est re. 400 fori valet ibidem l. $\frac{1}{9}$ $\frac{3}{4}$ 51 et quidam habet re. $\frac{3}{4}$ 423 piperis. hec est carica mina et re. $\frac{3}{4}$ 23 fori. quas ipse vult baratare ad masticem. et quesierit quot re. Gero. tamen de ipso pipere habuit de scribe questionem sic et multiplicabo $\frac{3}{4}$ 423 per $\frac{1}{9}$ $\frac{3}{4}$ 51 que per 100 et dividendo summam eorum per reliquos duos numeros. s. per $\frac{11}{24}$ 23 et per 400 que omnia sic fiunt. mult. bis 23 per suam virgulam videlicet per 24 et ad de 11 erit 463 et mult. 423 per suam virgulam erit 2618 item 51 per suas virgulas erit 1867 que pone sub $\frac{1}{9}$ $\frac{3}{4}$ 51 de tamen mult. 2618 per 1867 que per 100 que per ruptum que est sub virgula de 23 videlicet per 24 et dividendo per 463 et per regulam de 400 et per ruptos que sunt sub virgula de 423 et de 51 hec est per 4 et per 4 et per 9 et evitabo quod multiplicabo per 100 quod diximus in multiplicatione non dividendo per 100 que sunt in regula de 400 et remanebit 4 de ipsis 400 in quibus debemus dividere. Item potes adhuc reliquum $\frac{1}{3}$ ex divisione que est in virgula si reliquus totum de regula de 24 que debes multiplicare ergo multiplicabo 2618 per 1867 que per 8 et remanent de 24 Et dividendo summam per $\frac{1000}{4\ 4\ 463\ 12}$ exibit re. $\frac{3\ 4\ 83\ 6}{4\ 4\ 463\ 12}$ 221 ut in questione demonstratur.



Quod si per pensam 13 probare volueris quia multiplicabo 2618 per 1867 que per 8 ideo debes accipere pensam de 2618 per 13 hec est quod debes dividere 2618 per 13 et sic remanent 4 que multiplica per pensam de 1867 accepta similiter per 13 que est 8 et erit 40 de quo accipere pensam que est 1 que multiplica per 8 erit 8 que sunt per pensam summe multiplicationis ut videas si pensa exeuntis summe divisionis. s. de $\frac{3\ 4\ 83\ 6}{4\ 4\ 463\ 12}$ 221 erit similiter 8 tunc erit recta.

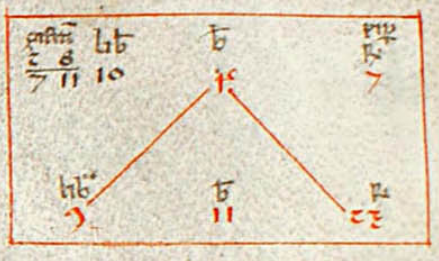
De pipere ad masticha

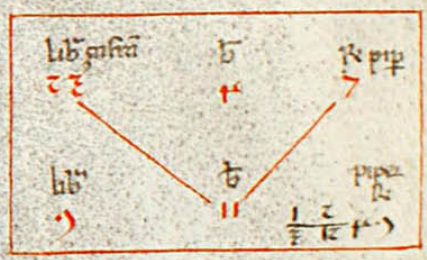
Item si eadem ratione quis querit quantum piper de re $\frac{3}{4}$ 423 masticis habuit. describes in questione $\frac{3}{4}$ 423 sub vocabulo masticis. s. sub 100 ut in hac alia demonstratione describitur et reperies omnes numeros sicut supra fecisti in precedenti questione et multiplicabo 2618 per 463 que per 400 et summam eorum multiplica per ruptos que sunt cum 51 s. per 4 et per 9 hec est per 36 et summam dividendo per 100 et per 1867 et per ruptos que sunt per 423 et per 23 hec est per 4 et per 24 Nam si evitare

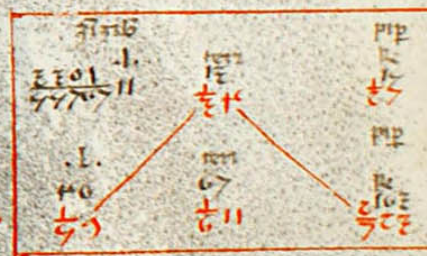


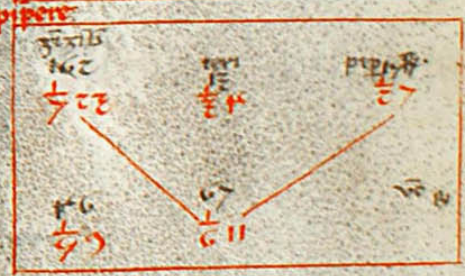
De masticha a pipere

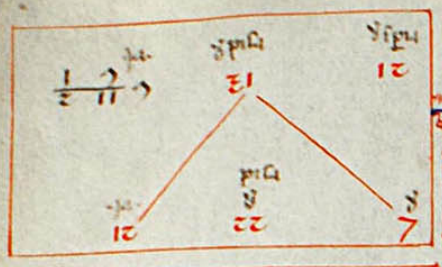
uoluīt bq mīs ecclīe potīs reliqs q̄ mlcēs p. 400 Lādnūs p 100 supdcīs
p 4 q̄ sē sub ūgla p 4 7 reliquēs ad huc q̄ mlb p 7 q̄ sē i regla d 4 q̄ sē sub
ūgla p 4 7 nichūs p 7 q̄s i regla d 7 4 7 suab 17 q̄ remanē d nīs 7 4 ad po
ned ea i capite ūgle pp unaal. g̃ mlb 7 618 p 467 q̄ p 7 q̄ remanē d 4 q̄ sē
pē 41 sb ūgla q̄ p 7 q̄ sē sub ūgla pē ead 41 eruq; mlcarō eor ī suma 7 647818
q̄ dnūs p 18 67 7 p 7 q̄ remanēt d 7 4 eabē p 7 67/18 7 118 4 pipis. bē ead 7
7 p 18 4 7 uē 7 67/18 7 7 ē pēlatis q̄is 7 p 17 q̄ repiē fz p lepra mod De pi
Icem sippaīt q̄ p 7 pipis ualeāt b. 4 7 ub 7 zaffīnu ualt pe ad gaffanū
b. 11 7 q̄nt q̄nū zaffānū q̄s d sē 7 7 pipis buīt. d sēbe q̄m sm sūy modū.
mlb 7 7 p 4 q̄ ē eis ead ūsio q̄ tot mlcā p 7 aī 7 sit eis d 4 ead ūsio. b̄ pz
sm̄ b alio mō dnōstrare p q̄ mod apti potīs cognoscē q̄s nec nūs ostēdere
debuīt. Jn b mō ē q̄ibz q̄nq; d sēbuīt nūi non aī q̄bz secūi nūy ignocūi rep
tu necce ē. vñ b mod uocāt regla secte ppetuīs. Cēq̄bz q̄nq; nūs q̄nq; in
uenīt rect in supiozi linea. 7 duos ī mdīo. 7 q̄nq; nec ī mdīo 7 duos ī ifīo
linea. Jlli duo nūi q̄ sē ī cetro mutuo ipī linee in q̄ rect nūi pōt fīme p eas
oppīt nūy alīt linee ī simīt mlcā. 7 p reliq̄s duos nūs eor sūmā dnūd. 7
q̄ cedūtīcē cū eīt q̄ntū tal secta nūi ut ī huc ī q̄ sē duo nūi. undecīz
d. 4 7 x. 7 ī sup linea. 7 in fīo sē nec nūi undecīz 7 11 7 7 2 d quibz
7 7 2 sē ī cetro mutuo ipī linee q̄ sūt ibi debz p eas oppīt nūm q̄ē mala
linea. s. unīo b ē p 4 ostēdē d 7 2 ī 4 suā 7 q̄ sup 7 mlcūs facīt 7 7 8
q̄ dnūd reliq̄s duos nūs. s. p 7 p 11 eabē. l 7 8/11 10 ut q̄ē septa ostēdit.
Jam ead rōe d sbē 7 2 zaffānū pplete uoluīt d sēbez q̄m ut d gaffanno ad pipe
bez. Ē sīlēr mō sē scīdi mēdū. 7 p̄tū uni mag sub p̄no alīt ut b m q̄
sē rect nūi ūtīo linea. s. 7 4 7 7 d q̄bz ȝ ī cetro mutuo 7 2 7 7 q̄ sūt mlcā
pe sē oppīt nūm. s. p 11 facīt 177 1 q̄ dnūd p reliq̄s duos nūs. s. p 4
7 p 7 bē 1/12 8/12 eabē 12. 1/2 7/12 1 pipis. bē 12 4 7 uē 1/2 7 de pipe aq̄gabu
bē 12 7 pipis ualēt mutuo 1/2 4 7 ub 1/2 7 zinzibz ualt mutuo 1/2 11 et
q̄nt q̄nū zinzibū q̄s d 12 1/2 7 2 pipis buīt. d sbe q̄m sm sūy mod. ut b 7 mlb
sīt rōne 1/2 7 2 p 1/2 4 7 dnūs sūma eor p reliq̄s duos nūs. s. p 2 7 7 p 1/6 11
d sic sit mlcā 7 p suā ūgla ei 14 q̄ pē sī 1/2 7 7 ostēa 4 p suā ungla ei
12 q̄ pē sī 1/2 4 7 7 p suā ūglam ei 4 6 q̄ pē sī 1/2 7 7 11 p suā ūglam ei 67
q̄ pē sī 1/2 11 7 7 2 p suā ūgla ei 162 q̄ pē sī 1/2 7 2 7 mlcā 162 p 12 q̄ sē ea
ad ūsio q̄ p 6 7 sūma eor mlcā p nup reliq̄s duor nūor. s. p 2 q̄ sē sub
ūgla pē 7 q̄ p 6 q̄ sē mūgla pē 11 7 dnūs eor sūma p regla d 14 7 p 67
b ē p 1/2 7/12 8/12 67 7 p nup reliq̄s eui nūor undecīz p 2 q̄ sē sub ūgla pē
4 7 p 7 q̄ sē sub ūgla pē 7 7 p 7 q̄ sē sub ūgla pē 2 7 2 eabē. l 2/4 7/4 1/67 11 de
Cē scīd rōe q̄nt q̄ 12. pipis d sē ualēt 1/2 7 2 zinzibis buīt d sēbe q̄m sm
sūm ut b ostēdit 7 mlcā 162 p 67 q̄ p 14 q̄ p nup ws q̄ sē sub 12 7 sub 4 6 b ē p
2 7 4 ē 2 4 12 4 q̄ dnūd p 12 7 7 p 4 6 7 7 nup reliq̄s q̄ē reliq̄s eui nūor. s. p

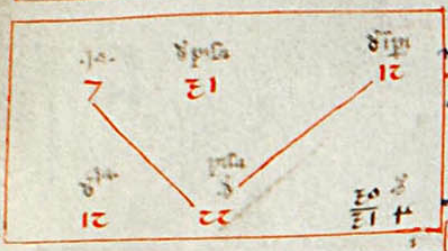


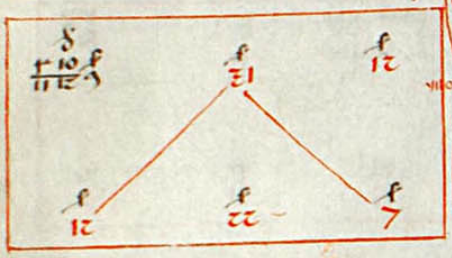


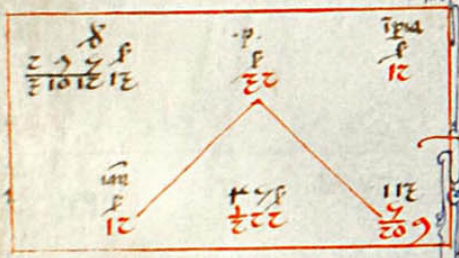












7 ꝑ 6 ꝑ 2 ꝯ [illegible] ut [illegible] 1/12 in capite [illegible] ꝑ [illegible] [illegible] 0 ℥ 4 9 7 / 2 7 1 ℥ 2 ℥ 12 ℔ 8

Item [illegible] ꝑ [illegible] ualeat pisaninos ℥ 1 Et sol. **De imperialibus ad ianuinos**

Ianuinorum ualeat pisaninos 2 2 ꝯ [illegible] ꝑ [illegible] ualeat imperiales 7 [illegible] ꝯ [illegible] et

[illegible] 7 ꝑ ℥ 1 [illegible] 12 ꝯ [illegible] ꝑ 12 ꝯ ꝑ [illegible] 2 2 [illegible]

[illegible] 12 ꝯ [illegible] ꝑ 12 imperiales [illegible] 7 ꝑ ℥ 1 ꝯ [illegible] ꝑ [illegible] 2 2 [illegible]

[illegible] 1/2 11 9 [illegible] **De eodem**

Item [illegible] ianuinis 7 [illegible] imperiales ualent [illegible] ianuinos 7 [illegible] 12 [illegible]

[illegible] 7 ꝑ 2 2 [illegible] imperiales 12 [illegible] ꝑ ℥ 1 ꝯ [illegible] 12 [illegible]

12 [illegible] 12 [illegible] imperiales [illegible] ut in [illegible] **De eodem**

Item [illegible] ianuinos [illegible] 7 imperialium [illegible] ꝯ [illegible] soldis.

[illegible] soldi [illegible] ꝯ [illegible] 12 imperialium ualent sol.

[illegible] ℥ 1 ianuinorum ualent sol. 12 pisaninorum. [illegible] sol.

7 imperialium [illegible] soldis 12 imperialium ut [illegible] 7 ꝑ ℥ 1 [illegible] ianuinos 12 [illegible]

[illegible] ꝑ 12 imperialium ꝯ ꝑ [illegible] 2 2 [illegible] 1/2 [illegible] sol. [illegible] 11 [illegible] 9

ut in [illegible] Meminiscatis itaque [illegible] notare [illegible]

[illegible] negotiationum [illegible]

[illegible] ꝯ [illegible] ꝯ [illegible] ꝯ [illegible] ꝯ [illegible]

[illegible] ꝯ [illegible] ꝯ [illegible] ꝯ [illegible] ꝯ [illegible]

ꝯ [illegible] ut [illegible] alia [illegible] Inquit [illegible] imperiales [illegible] 7

ianuinorum [illegible] 12 imperialium ualent

℥ 1 pisaninorum [illegible] 12 ianuinorum ualent [illegible] 2 2 pisaninorum [illegible] notatur

[illegible] 7 ianuinorum [illegible] 12 [illegible]

ut [illegible] 7 ꝑ 2 2 [illegible] ꝑ 12 imperialium [illegible] ꝑ ℥ 1 ꝯ ꝑ 12 ianuinorum

[illegible] 8 ℥ 1 ℔ 12 ℔ 0 ℔ **De eodem**

Item sol. imperialium ualent pisaninos 1/℔ 2 2 ꝯ sol. ianuinorum ualent pisaninos 1/2 2 2 [illegible]

soldos ianuinorum [illegible] ualent sol. 9 [illegible] sol. 5/12 9 imperialium [illegible] ut [illegible]

[illegible] sol. 12 imperialium ualent sol. 1/℔ 2 2 pisaninorum ꝯ sol. 12 ianuinorum ualent

sol. 1/2 2 2 pisaninorum [illegible] sol. [illegible] ut [illegible] ꝯ [illegible]

5/12 9 ꝑ 1/℔ 2 2 ꝑ 12 ianuinorum [illegible] 1/2 2 2 ꝯ ꝑ 12 imperialium. [illegible]

[illegible] 12 ianuinorum ut [illegible] 12 imperialium [illegible] 5/12 9 ꝑ 1/℔ 2 2 ꝯ [illegible] ꝑ 1/2 2 2

[illegible] ꝑ ℔ ꝯ [illegible] 1 [illegible] 12 9 [illegible] 1/℔ 2 2 [illegible] 12 ꝑ [illegible]

[illegible] 4 9 [illegible] 1/2 2 2 ꝯ [illegible] 9 ꝑ [illegible] 12 [illegible] 11 ℥ [illegible] 11 ℥ ꝑ 12 9 [illegible]

[illegible] ꝯ [illegible] ꝯ [illegible] 4 9 [illegible] 1 0 / 4 9 ꝯ ꝑ [illegible]

[illegible] 2 2 ꝯ [illegible] 9 [illegible] ꝑ 12 [illegible] in una [illegible] ita ut 1/12

[illegible] 1 0 0 0 / 2 9 10 12 [illegible] Unde [illegible] multiplicatione potes

[illegible] 2 [illegible] ꝑ 2 [illegible] sub [illegible] 11 ℥ ꝑ 12 9 [illegible] 1 0 0 / 9 10 12 [illegible] ut [illegible] potes ad

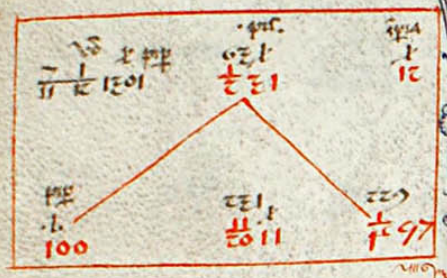
[illegible] 12 9 [illegible] ut [illegible] ℔ ℥ [illegible] 11 ℥ [illegible] 8 4 9 [illegible]

Regula ad inuenienda latera trianguli rectanguli. De eodem

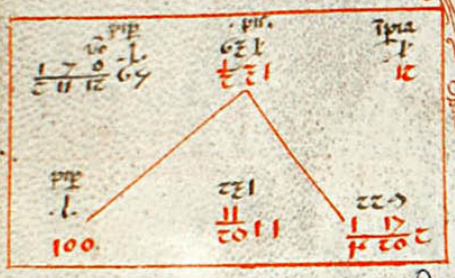
Si fuerit solidum ipsatum uelut pisanum quod ipsum uocatur pisanum et quaeritur quot sint in eo ipsati, ducatur numerus ipsatorum in se ipsum et fiat quadratum. Deinde ducatur idem numerus in quadratum et fiat cubus. Deinde ducatur idem numerus in duplum sui quadrati et fiat quadratum. Deinde ducatur idem numerus in duplum sui cubi et fiat cubus. Deinde ducatur idem numerus in quadratum sui quadrati et fiat quadratum. Deinde ducatur idem numerus in duplum sui quadrati quadrati et fiat cubus. Deinde ducatur idem numerus in quadratum sui cubi et fiat quadratum. Deinde ducatur idem numerus in duplum sui cubi cubi et fiat cubus. Deinde ducatur idem numerus in quadratum sui quadrati quadrati et fiat quadratum. Deinde ducatur idem numerus in duplum sui quadrati quadrati et fiat cubus. Deinde ducatur idem numerus in quadratum sui cubi

l. $\frac{1}{7}$ $\frac{106}{127}$ $\frac{10}{12}$ $\frac{9}{20}$ 4 De imperialib: ad pipere

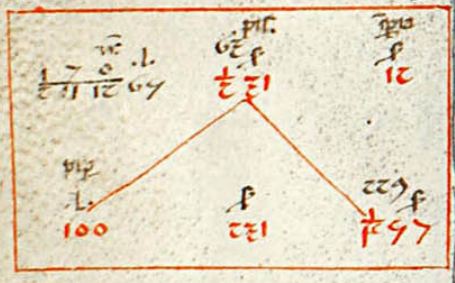
Rursum sol' imperialium valet pisaninos $\frac{1}{2}$ 21 et cent piperis valet l' $\frac{11}{20}$ 11 et huius libras $\frac{1}{4}$ 47 imperialium de quibus volumus habere piper. Queritur quantum huius de ipso pipere pro illis libris $\frac{1}{4}$ 47 imperialium. describes quomodo ut hic ostenditur. Et quia pretium piperis. s. $\frac{11}{20}$ 11 est de genere librarum et libre $\frac{1}{4}$ 47 de quibus volumus piper emere sunt ex eodem genere. necessarium est ut numeri qui sunt in superiori linea videlicet 12 et $\frac{1}{2}$ 21 fiant similiter l'. unde super notabis libras super unum quemque ipsorum ut fiat talis questio quod l' 12 imperialium valeant l' $\frac{1}{2}$ 21 pisanorum. et sic habebis libras imperialium. s. $\frac{1}{4}$ 47 sub. l' 12 et libras pisanorum sub libris pisaninis videlicet $\frac{11}{20}$ 11 sub $\frac{1}{2}$ 21 Deinde hic facto multiplica $\frac{1}{4}$ 47 per $\frac{1}{2}$ 21 que sunt ex adverso que per 100 que eisdem $\frac{1}{2}$ 21 sunt ex adverso. et summa dividatur per alios duos numeros qui remanent in questione. s. per 12 et per $\frac{11}{20}$ 11 exibit libre piperis $\frac{7}{11}$ $\frac{1}{12}$ 1201 ut in questione ostenditur. hic est centenaria 12 et l' 1 et unde $\frac{7}{11}$



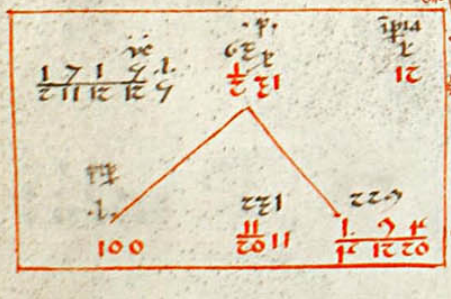
Nam si prescripta iterum quereres quot piper habeas pro sol' $\frac{1}{4}$ 47 tunc in hac questione scias hic. $\frac{1}{4}$ 47 de eodem aliter esse describenda. videlicet ut de sol' $\frac{1}{4}$ 47 facias libras eorumque libre 2 et sol' $\frac{1}{4}$ 17 hic est libre $\frac{1}{4}$ $\frac{17}{20}$ 2 que pone sub imperialibus 12 in questione. et super notabis l' super 12 ut super similiter notes l' super pretium prescriptorum 12. s. super $\frac{1}{2}$ 21 que ponenda sunt in questione super pretium centenarii piperis videlicet super l' $\frac{11}{20}$ 11 et erit ibidem libre pisanorum sub libris pisanorum. s. libre $\frac{11}{20}$ 11 sub libris $\frac{1}{2}$ 21 et l' imperialium erit similiter sub libris imperialium. hic est libre $\frac{17}{20}$ 2 sub libris 12 ut in hac questione ostenditur quare multiplica $\frac{1}{4}$ $\frac{17}{20}$ 2 per $\frac{1}{2}$ 21 que per 100 et divides summam per $\frac{11}{20}$ 11 et per 12 et per $\frac{1}{4}$ exibit libre piperis $\frac{1}{2}$ $\frac{7}{11}$ $\frac{0}{12}$ 64 ut in questione ostenditur que sunt vigesima pars de libris $\frac{7}{11}$ $\frac{1}{11}$ 1201 sicuti sol' $\frac{1}{4}$ 47 sunt $\frac{1}{20}$ de libris. $\frac{1}{4}$ 47



Possumus enim hanc eandem questionem aliter describere videlicet ut ponamus sol' $\frac{1}{4}$ 47 imperialium sub imperialibus 12 et notentur sol' super eos. et quia sunt sol' ipsi $\frac{1}{4}$ 47 necessarium est ut 12 que super eos sunt fiant similiter sol'. ergo et $\frac{1}{2}$ 21 erit similiter sol'. quare notabis sol' super $\frac{1}{2}$ 21 et super 12 et quia pretium centenarii piperis. s. l' $\frac{11}{20}$ 11 ponendum est sub pretio imperialium videlicet sub $\frac{1}{2}$ 21 ergo necessarium est ut sicuti ipsi $\frac{1}{2}$ 21 sunt sol'. ita de libris $\frac{11}{20}$ 11 facimus soldos. eorumque sol' 221 quem numerum describes in questione sub $\frac{1}{2}$ 21 et notabis sol' super eum ut in hac alia continetur de scriptione in qua talis est questio quod sol' 12 imperialium valent sol' $\frac{1}{2}$ 21 pisaninorum et centenarium piperis valet sol' 221 et queritur quantum piper quis habuit pro sol' $\frac{1}{4}$ 47 multiplica itaque 229 que sunt super $\frac{1}{4}$ 47 per 63 que sunt super $\frac{1}{2}$ 21 que per centenarium piperis. et divides summam eorum per regulam de 221 que est $\frac{100}{2711}$ et per $\frac{1}{12}$ et per $\frac{1}{2}$ que sunt sub virgula post 21 et per 4 que sunt sub virgula post 47 hic est per $\frac{10000}{2711}$ et evitabis inde hic quod evitare potes exibit similiter libre $\frac{1}{2}$ $\frac{7}{11}$ $\frac{0}{12}$ 64 ut in precedenti questione ostenditur.



Rursum si eadem ratione quesieris quantum piperis huius pro imperialibus $\frac{1}{4}$ 47 scias quod De eodem huius in tot uncias quot habuisti libras de sol' $\frac{1}{4}$ 47 hic est uncias $\frac{1}{2}$ $\frac{7}{11}$ $\frac{0}{12}$ 64 ideo quia sic dicitur $\frac{1}{4}$ 47 sunt $\frac{1}{12}$ de sol' $\frac{1}{4}$ 47 ita et uncie $\frac{1}{2}$ $\frac{7}{11}$ $\frac{0}{12}$ 64 sunt $\frac{1}{12}$ de libris $\frac{1}{2}$ $\frac{7}{11}$ $\frac{0}{12}$ 64 et quia vis hic. sic qualiter per artem ipse uncie reperiantur indicabimus. possumus enim hanc questionem duplici modo describere. primum quidem ut sicuti pretium centenarii piperis. s. $\frac{11}{20}$ 11 sunt libre ita pretium imperialium videlicet $\frac{1}{2}$ 21 sint similiter libre que aliter esse libre non possunt nisi imperiales 12 fuerunt similiter libre. unde notabis l' super 12 et $\frac{1}{2}$ 21 Deinde quia oportet describere imperiales $\frac{1}{4}$ 47 sub dictis libris 12 imperialium necessarium est ut de ipsis imperialibus $\frac{1}{4}$ 47 facias partes unius libre



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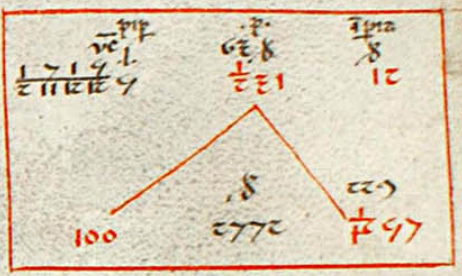
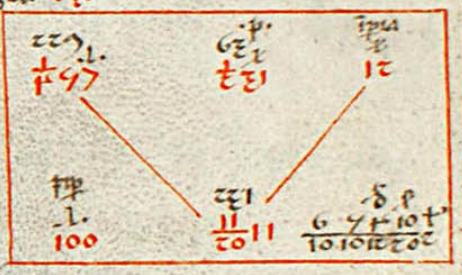
ut sit libre sub libris erūnt $\frac{1}{4}$ $\frac{2}{12}$ $\frac{1}{20}$ unī libre quia ūgulā pēs sub 12 ut b'ny
qē ostēdit. 7 ē tal' q̄stio q; l' 12 ipialiū ualēt l' $\frac{1}{2}$ 21 pisanor. 7 cētenariū
pipis ualeţ l' $\frac{11}{20}$ 11 pisanor 7 q̄rit q̄ntū pipis quis buīs p $\frac{1}{4}$ $\frac{2}{12}$ $\frac{1}{20}$ unī lib'
oīb' 1' q̄ sūt sr' 20 p 12 7 adles 9 q̄ sūt sr' $\frac{11}{20}$ q̄ p 1' 7 adles 1 er' 221 q̄ mlt' p 67
7 p 100 q̄ p 20 q̄ sb' sub ūgla post 11 7 duudes sūmā eor p regl'am de 221 q̄ ē
$\frac{1}{4}$ $\frac{0}{7}$ $\frac{0}{11}$ 7 p 12 7 p alios rupios uidelicz p 12 7 p $\frac{1}{4}$ $\frac{0}{12}$ $\frac{0}{20}$ b' ē p $\frac{1}{2}$ $\frac{0}{7}$ $\frac{0}{8}$ $\frac{0}{11}$ $\frac{0}{12}$ $\frac{0}{20}$ $\frac{0}{12}$
er cumul' b' q; cumule potes exhib' lib' $\frac{1}{2}$ $\frac{7}{11}$ $\frac{1}{12}$ $\frac{4}{12}$ 7 ut in q̄e ostēdit' q̄d dūi ē q̄n
dūi ūde $\frac{1}{2}$ $\frac{7}{11}$ $\frac{1}{12}$ 67 ut p̄dixi'.

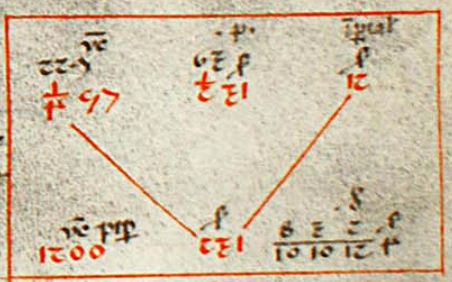
Item ali' mod' solūdi hūc q̄ey ē ut ponas ducos ipiales $\frac{1}{4}$ 47 sub ipialibz
12 7 er' dr' $\frac{1}{4}$ 47 12 er' $\frac{1}{2}$ 21 Quare notē' dīn sup unū quēq; ipōz nūōz
7 q̄ā p̄mū cētenariū pipis uidelicz l' $\frac{11}{20}$ 11 solūdū ē sub dūi $\frac{1}{2}$ 21 necessariū ē
ut de ipis l' $\frac{11}{20}$ 11 fiaal dūos q̄ sūt 2772 7 ponas eos sub $\frac{1}{2}$ 21 ut sit dīn sub
dūi ut in hac alia q̄stiē ostēdit' 7 oīb' 221 p 67 q̄ p 100 Quor sūmary
duudes p regulā de 2772 q̄ ē $\frac{1}{4}$ $\frac{0}{7}$ $\frac{0}{11}$ 7 p impiales 12 7 p rupios. s. p $\frac{1}{2}$ 7 p
$\frac{1}{2}$ 7 cumul' b' q; cumule potes exhib' sūr libre pipis $\frac{1}{2}$ $\frac{7}{11}$ $\frac{1}{12}$ $\frac{4}{12}$ 7 ut in ay
precedēti q̄e muenim'.

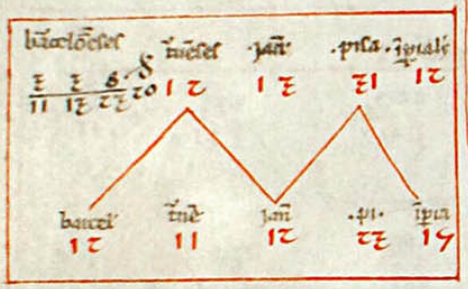


De pipe ad imperil'

Et si cont' q̄ dicit' q̄r impiales q̄ sūt tāt' de libris $\frac{1}{4}$ 47 pipis hūi. dicēdū
liquidē libras $\frac{1}{4}$ 47 sup centenariū pipis ut in hac alia cernit' dicēdū.
Et mlt' $\frac{1}{4}$ 47 p $\frac{11}{20}$ 11 q̄ p ipiales 12 7 duudes sūmā p 100 7 p $\frac{1}{2}$ 21 q; fit sēdm
q; supi' insimulabz d'mōstrauim' 7 cumul' $\frac{1}{2}$ $\frac{1}{2}$ q̄ sūt in regla de 67 7 aptab'
ūgulā duribz sic ut sub caput ipi sit $\frac{1}{12}$ $\frac{0}{20}$ dd q; sūmā debz poni sub
libris 12 ipialiū exhib' lib' $\frac{6}{10}$ $\frac{4}{10}$ $\frac{1}{12}$ $\frac{10}{20}$ 7 p p̄mo dīm libras $\frac{1}{4}$ 47 pipis.
Item si q̄nt' q̄r ipiales p ūcail $\frac{1}{4}$ 47 buīs. aut d' ūcail $\frac{1}{4}$ 47 fiaal d' eodem
lubmil q̄ sūt libre $\frac{1}{4}$ $\frac{2}{12}$ 1' 7 pēs eal' sup cētenariū pipis. aut d' cētenario fiaal
ūaal' q̄d ē mlt' 1200 sup qual pēs ūaal' $\frac{1}{4}$ 47 Et nota q̄d pulcius ē fiē
ūaal. d' libris in hac 7 in simulabz q̄mbz quia d' ūcail fiē libral'. idē q̄ ai
d' ūail fiaal' libris. augebūt q̄nq; rupia in q̄e. Vñ q̄stio uidet' cē ipedi
ua. Ppē q̄d ai solidos ul' dūos sub libral' ul' sup libral' dūor in alīq alia
q̄e ponē oporteuerit. pulcri ē fiē solidos 7 dūos d' libris. quia d' solidis 7 dūis
fiē libral' ul' partes ipius. 7 pulcul' ē fiē gna d' tarenis quia d' gnis fiē
tarenos. Ic idē intelligit' d' bizātijs 7 d' oīb; mētis quia uls alit' in q̄bz
dā q̄mbz huī antecedēt' capitulo supi' d'mōstrauim'. d' sēpis unq;
ūail $\frac{1}{4}$ 47 sit ūaal 1200 hic sol' d' p̄mo cētenariū pipis. s. d' libris $\frac{11}{20}$ 11 er' sol'
221 quos pēs sub $\frac{1}{2}$ 21 7 er' tē tal' q̄stio q; sol' 12 ipialiū ualēt sol' $\frac{1}{2}$ 21
Et ūae 1200 pipis ualēt sol' 221 ut i hac alia q̄ne d'mōstrat'. Et sciaş
q̄d sēcm' sol' d' libris $\frac{11}{20}$ 11 ut cēt sol' ipi ai ipialibz 12 sub q̄bz ponē
dē sūma. s. p̄mū d' ūncail $\frac{1}{4}$ 47 q̄d p̄mū ai ni sut pat' in magna quātitate
liquidī d'mōstrabit' ai q̄stio fuit' ad sol'. quia ai fuit' ad lib. 7 mlt' 221
p 221 q̄ p 12 q̄ p 1' q̄ sūt sub ūgla. 7 duudes sūmā p 67 q̄ p 1200 q̄ p 1' 7 cumu



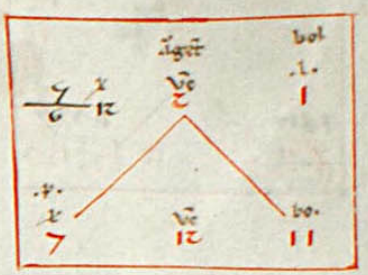


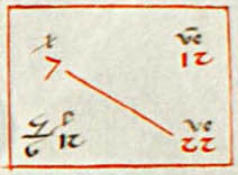


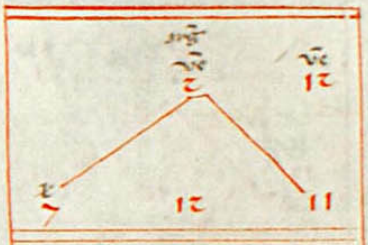
Dbaratis moetaꝫ cū plēi mūde

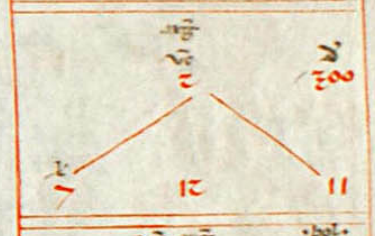
Dēptōe cuiūdā bolsonalie ad ꝑdus libre

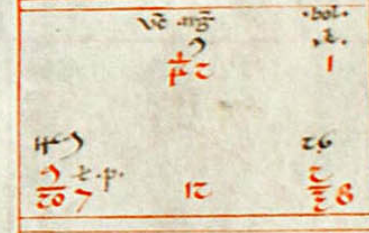
Incipit parsta nonu capitli de emptōe bolso

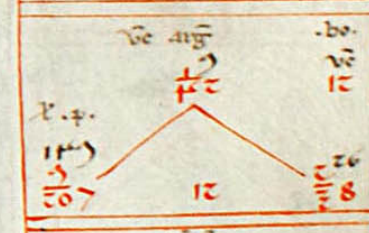


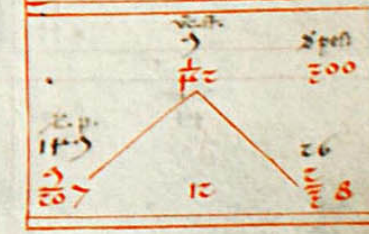


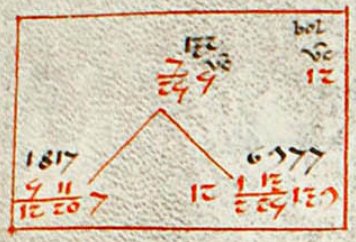


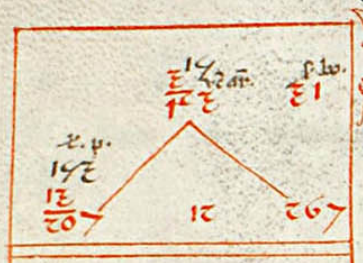


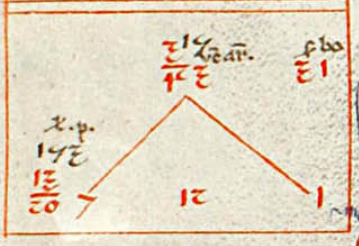


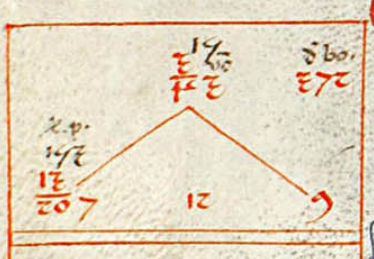


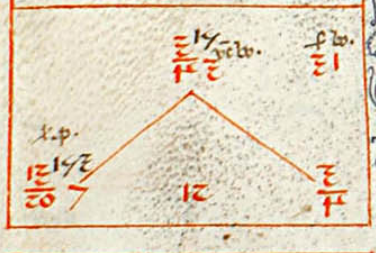


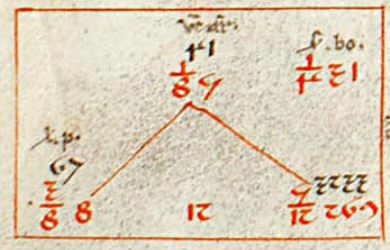








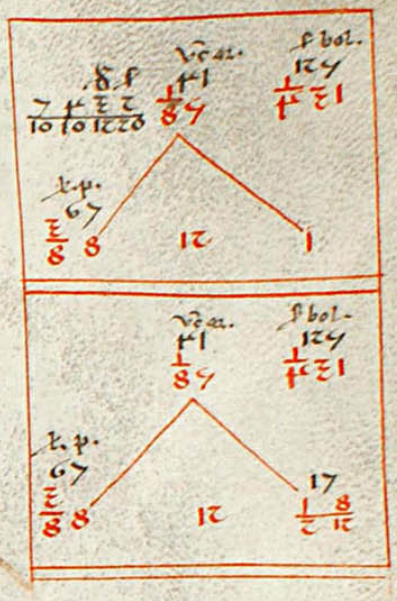


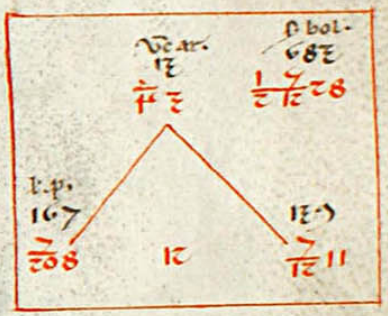


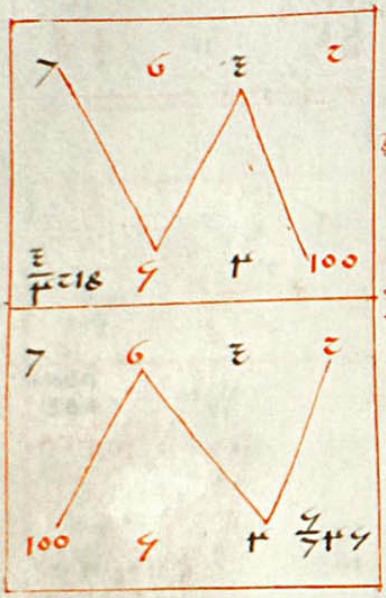
Et libra argẽti ualet lib 4 11 12 to 7 psanno3 sue marce ual' 1 12 7 12 4 12 11 et ũe 1 12 7 12 4 12 9 quas d'scẽde sub ũal' libre. lol. s. sub 12 ut sit ũe sub una al' ut in d'sẽptõe ostẽdit'. 7 mlt'is ũal' 12 9 lol. p sua ũgulã. b' ep 12 4 7 adde 12 q̃p 7 adde 1 et' 6 9 7 7 sit' q̃ pẽ pensa ipa3 q̃ ẽ 4 p septenariũ d'm mlta una al' 4 argẽti p sua ũgulã b' ẽ p 12 4 7 adde 7 et' 12 12 q̃ pẽ sit' 7 12 4 7 d'sup pẽ pẽsa q̃ ẽ 6 sit' facies d'libras 4 11 12 to 7 Et habeb' sit' ipa 1817 q̃p pensa ẽ. p d'ni mlta 6 9 7 7 p 1 12 q̃p sũma mlta p 1817 Et dnudes totã sũmã p 12 lol. 7 p 12 argẽti. 7p q̃ nuẽ q̃ st' sub ũgul'. 7 eutrab' h' qd' eutrare potũt 7 aptabis nupcas 7 plurib' mlionel' 7 diuisionel' s'm q' supi' d'monstratu est. Et habeb' libras 12 12 9 1 6 8 12 12 4 10 10 10 12 to 8 p pmo sũe unciar 1 12 12 12 9 7 ẽ pensa sume sit' pti 12 p septenariũ post eutractiõm. De lol'sonalia eã uendit' ad ũnum vidã bt' libras 12 7 solidos 7 cuidã lol'sonalie d' qua mutuat' in libra sol' 12 1 Et libra ipi' d'ciet' ũce 12 12 Et libra argẽti ualet libra 12 to 7 psanor3. Quente q̃t' psantes. d' sta lol'sonalia huiꝰ facies solidos d' libras 7 to 12 et' sol' 12 67 quos pẽs sub sol' 12 1 ut sit sol'. sub soloꝝ ut in hac q̃ ostẽdit'. Et mlt'is 12 67 p nũz d' 12 12 12 p 12 4 q̃p nũm d' 12 to 7 b' ẽ p 12 4 12 7 duudes sũmã p 12 1 7 p 12 7 pom3 nupcas adde p 12 7 p 12 o erabit lib 1 12 12 2 11 12 to 12 o psanor3 p pti d' libras 12 4 7 pdicar' lol'sonalie. Et simil' scire q̃t' psantes ualeat sol' 1 dicet. lol. d'cẽde 1 p tpo sol. sub sol' 12 1 ut h' ostẽdit' 7 mlt'is ipos 1 p 12 12 q̃p 12 to 7 7 duudes p 12 7 p 12 7 12 1 b' ẽ d' mlt'is ducati 1 p 12 4 q̃p 12 4 7 et' 12 12 9 4 q̃ duudes p 1 12 12 1 12 12 0 0 erabit 12 12 12 14 6 1 12 12 to b' ẽ dñi 12 12 14 12 12 1 18 q̃ sũt dñi 1 12 18 7 ãpli' 1 12 12 unc' dñi. Ergo libra pti' unc' sol' pdicar'. lol. possum' p eã 1 cepite pti' quattuor libras ul' sol'. ut d'ctum est' s'm q' supius in anteceden' capl'o d'monstratum', De eod' Et hoc sit. lol. huiꝰ ẽãti dnos 7 ad ãbi andũ. aut d' solidis 12 1 facies denos q̃ sut 12 7 pẽs eor' sit' dnos 7 sic' ut in hac d'sẽptõe ostẽdit'. Aut d' dnis. 7 facies partes unc' sol' s. 12 12 7 pẽs eos sub 12 1 ut inferi' i alia d'sẽptõe ostẽdit'. Nam i ista non d'sẽptõe mlt'is dnos 7 p 12 4 q̃p 12 4 7 7 duudes p regla d' 12 7 q̃ ẽ 1 12 12 1 7 p 12 7 p nupcas. b' ẽ p 1 12 12 1 12 12 0 0 0 0 0 0 erabit mi 1 12 d' 12 4 b' ẽ q̃ mlt'is 7 pẽa pars d' 12 4 s. p. 4 q̃p 12 4 et' 6 8 8 4 q̃ duudes p 1 12 12 1 12 12 0 0 0 0 erabit 1 12 8 7 1 1 12 12 to In alia uo d'sẽptõe mlt'is 12 q̃ st' sup 12 p 12 4 q̃p 12 4 et' sit' 6 8 8 4 q̃ duudes p 12 1 7 p 12 7 p pẽs nupcas. b' ẽ p. 1 12 12 1 12 12 0 0 0 0 0 0 erabit 1 12 8 7 1 1 12 12 to b' ẽ dñi. 1 12 8 7 12 1 Cum sit. l. 7 12 to 12 7 cuidã lol'sonalie q̃ sut. ad ũnc' al' 1 8 4 argẽti. De eodem cum libra ipi' sut sol' 12 1 q dñi 12 b' ẽ sol' 1 12 7 1 Et libra argẽti ualẽt lib 8 7 sol' 7 dñi 6 b' ẽ lib' 12 8 fac' sol' d' lib'. 7 12 to 12 7 et' sol' 7 12 6 7 quos pẽs sub 12 1 7 1 ut h' ostẽdit'. Et mlt'is 6 7 p sua ũgulã et' 12 12 12 q̃ pẽ sit' 7 12 6 7 7 sit' ipa pẽ pensa ipos q̃ ẽ 10 p 11 sit' facies d' 1 8 4 7 habeb' 1 sup ipa quor ũ pensa ẽ 8 b' ẽ d' facies d' 12 8 8 7 habeb' 67 7 p pẽsa 1 q̃ h' 1 12 7 1 habẽ 12 4 d' mi mlt' 12 12 12 p 1 7 p 67 q̃ st' sup ũgla d' 1 7 duudes sũmã p regla d' 12 4 q̃ ẽ 1 4 4 4 7 p 12 7 p nupcas una rel q̃p nuos. s. p 12 7 p 8 7 p 8 7 aptab' nupcas. 7 eutrabs

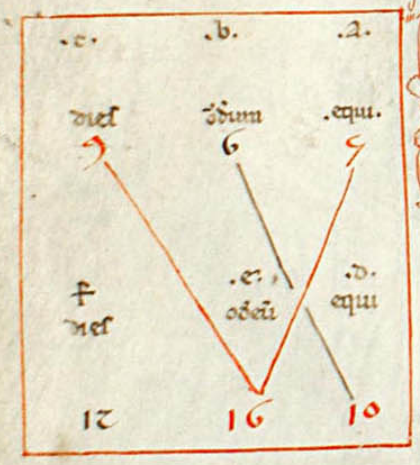
4 p'

qplab' sep. ecabr. l'. 1 2 7 3 8 16 / 2 6 10 10 12 20 2° p ptio ducat' lib'a' 12 qf') q d': 4
Ti ptui uni' sol'. cdē bolsonalie reptre uolūt'. d'scdeg 1 sub 1/p' 2 1 9' De eodē
mlt'ipīy 1 p' 1 er' p' 1 q mlt' p 67 er' 2 7 p' 7 q reliquef o'stante p' qs sub ū
gula post 2 1 9 nō duudef p' qs' mtegla d' 8 q sē sub p' 1 ergo duudeg 2 7 p' 7
p' 4 q p 12 q p 2 q remanēt d' 8 q siūt sub ūgla post sub p' 1 q p 8 q siūt sub
ūglā sub, 67 Et aptab' nptog ecabē 7 p' 2 / 10 10 12 20 ut ī hac d' septē ostēdat'. hē
punī mun' d' qnf 1/2 2 7 udelicz 2/4 uni' dēū. mun' puna quāq; lib'a. 9 b' cogitat'
un q ptui sol' ē qnf 7 p' 2 / 10 10 2 7 hē dā p' 7 / 100 2 7 aqb; usq; ad nf 1/2 2 7 d' siūt 2/100
uni' dēi g' si unicuiq; sol. d' siūt 2/100 uni' dēū 9 libre. s. sol' 20 d' 60/100 hē 2/4
unus dēus ut ptendimus. De eodem
Tem si q'tat' ptui d' qnf 1/2 8 cdē. bol. aut d' sol' 1/p' 2 1 fiūt eg dēg q sē 2 7 4 7 pēg
subeat dictog dēlos 1/2 8 ut' d' ipī dēus 1/2 8 faciet partes uni' sol. s. 1/2 8/12 9 pēg ipīg
sub sol' 1/p' 2 1 ut sit sol'. sub solog. ut in hac d'septē ostēdat'. 9 mlt' d' eg 8 p sua
ūgula er' 17 q mltīg p' 1 q p 67 q p' q siūt sub ūglā post 2 1 Et duudeg p 12 9
q p' 7 p ptuptog. s. p 1/2 0/12 2 p 8 7 p 8 9 eu tab'. 9 ea p tab'. 9 ecabē 1 6 7 p' 7 1 / 2 8 10 10 12 20
hec ē dēū. 1/2 6 4 p'/10 10 17
Tem q dā hē sol' 11 9 dēū 7 hēp 7/12 11 cui' dā. bol. q ē ad ūca as 1/p' 2 7 mtuū ī hīb
ptil bol. sol 2 8 q dā 1/2 4 hē sol' 1/2 7/12 2 8 7 hibn a'gtu ualet lib' 7/20 8 d'scdeg qēg
ut' b' ostēdat'. Et mla 2 8 p sua ūgulā er' 6 8 2 silī' mla eg nuīg p sua sūglag.
9 habeb' 12 sī' 1/p' 2 7 167 fī' 7/20 8 q 2 9 sī' 7/12 11 Et cē mlab' 12 9 p 12 q p 167 q p nup'
tog q eg cai 2 8 s. p' p 12 9 duudeg sūma p 68 2 9 p 12 9 p nuptog cui nuīg mlto'
s. p 12 9 p' 9 p 20 9 eu tab' 9 ea p tab' 9 sic habeb' 1 6 6 p' 7 p' 1 / 2 6 8 2 12 20 p ptio d' soldg
7/12 11 dicte bol. Et sic potīg q'tūlib' bolsonalia' ptia p d'monstratū modum
sciat' pportiōl reptre q' pportio' 9 pōta eq'dualg datis' pportiōibz. Et cai' pportio
aliq' ē 9 pōta eq'f cāq; pportiōibz cē pportio pportiū ipā applīat'. q 9 pōta
qualē fiat luadū d'mōstrabo. Sit sūma aliq' d' qua efficat' sūma sciā p datā du
duoz' nuīo' pportiōy 9 d' sa sūma sit cta p pportiōem duoz' quoz' lib' nuīo
nū 9 d' cta eod' modo efficat' quāta. 9 sic d' uceg. cē p'me sūme pportio ad ul
timā dicat' cē 9 pōtā eq'ōibz datis' pportiōibz. s. q pportio ē facti nuū eq'ōibz
añcedentibz ad factū nuīy eq'sequentibz eas ē p'me sūme ad ultimā. Vbi g'tū
q dā huius biī 100 d' quibz unus' mo' toto d' duob' fec' ta. Jn sciā d' q'tuor. q'nq;.
Jnuēio eq'sec fec' septē. pcē has pportiēg ī una ūga sic 2/4 p' 6/7 9 siūt eg añce-
dēs sup' ut'gi 9 sequentes sub ipīs. 9 q' in p'mo toto d' duob' fec' ta. p'ma sūma
ad sum ē sic 2 ad 2 qr' p'ma sūma ē 2/2 se de q' ai d' p' fec' 4 ē pportio sciē
sūme ad cta sic p' ō ad 4 qr' sa sūma ē p'/4 cte sūme. 9 sic p'ma sūma ē 2/2 de
p'/4 cte sūme. d' q' cta sūma cai d' 6 siūt 7 ē cta sūma 6/7 q'te sūme. Quare
p'ma sūma ē 2/2 d' p'/4 equalis me q'ste sūme. q'g duaq; sūmaq; pportio ē sic
facti nuī eq'añcedētibz ad factū eq'sequentibz. Et ē fact' eq'añcedentibz p' 8 q'ē
simil' p'me sūme — q' p'eat' eq'mlcatē añcedētū in se. s. d' 2 in p' q' in 6 fact'









quidem ex consequentibus est 105 quia quinque ducti in 7 faciunt 105 et assimilantur ultimo
summa. Et si a principio pro prima summa habeantur 48 pro quarta habebuntur 105 quia si 105
acceperis $\frac{6}{7}$ venient 90 pro tertia summa. Et quibus si acceperis $\frac{4}{5}$ venient 72 pro secunda summa. Et
quibus si acceperis $\frac{2}{3}$ venient 48 pro prima summa. Vel aliter si 48 et 2 tertia tertia venient
72 et quibus si 4 secunda 5 venient 90 et quibus etiam si 6 sunt 7 hoc est quod $\frac{1}{6}$ de 90 multiplicatis per 7
venient 105. Et proportio 48 ad 105 est composita ex duabus proportionibus. scilicet ex ea quam
2 habent ad 3 et ex ea quam 4 habent ad 5 et ex ea quam 6 habent ad 7. Et quia est sicut 48 ad 105 ita
prima est ad quartam summam. Et si prima summa fuerit 100 multiplicandus est per 105 et dividendus
per 48 vel si hoc sortiri modo habuerit [illegible] prima proportione in una linea scilicet 2 et 3
et sub 3 pone antecedentem secunde proportionis scilicet 4 postquam pone 5 et sub 5 in superiori linea
pone antecedentem tertie proportionis scilicet 6 postquam pone 7 et 100 pone sub 2 quibus multiplicatis per 3
quibus per 5 quibus per 7 [illegible] summa multiplicationis facta ex consequentibus in 100 quam divides per an-
tecedentes scilicet per $\frac{100}{2\cdot 4\cdot 6}$ [illegible] $\frac{10}{6\cdot 8}$ [illegible] $\frac{3}{4}$ et 18 pro ultima summa. Et si proponatur quod ultima
summa fuerit 100 et [illegible] prima pone 100 sub 7 ut in hac alia patet [illegible].
et multiplica 100 per [illegible] ex antecedentibus. Hoc est per 6 quod per 4 quod per 2 et divides per consequentes scilicet per
$\frac{100}{3\cdot 5\cdot 7}$ [illegible] $\frac{5}{7}$ [illegible] pro prima summa [illegible] manifestum est quod composita proportio ex datis
quantitatibus proportionibus numeris facta ex omnibus antecedentibus ad numerum factum ex consequen-
tibus. Nam si proportionem [illegible] extrahere vis multiplica antecedentem illius proportio-
nis [illegible] alia extrahere vis per consequentem alterius et habebis antecedentem residue proportionis.
et ex multiplicatione duorum residuorum numerorum habebis consequentem. Ubi gratia proportionem 3 ad 4 vo-
lumus extrahere ex proportione 2 ad 5 pro prima proportione pone $\frac{3}{4}$ et pro secunda pone $\frac{2}{5}$ et multiplica
2 per 4 erunt 8 et 3 per 5 erunt 15 quod pone sub 8 et habebis residuam proportionem quam si accidentibus [illegible]
portione quam 3 habent ad 4 [illegible] proportio quam 2 habent ad 60 scilicet quam 2 habent ad 5 [illegible]

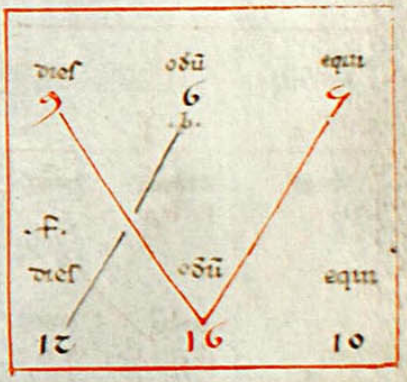
Quinque equi comedunt Explicit pars secunda noni capituli. Incipit tertia de equis qui comedunt ordinum in proportionibus diebus
sextana 6 ordinum in diebus 9 [illegible] dies [illegible] comedunt sextana 16
pone in superiori linea 5 pro equis et 6 pro cadio et 9 pro diebus [illegible] et sub 5
pone 10 equos et 16 sextana pone sub 6 et multiplica 5 per 16 quod per 9 erunt 720 quod divide per 6 et
10 [illegible] dies 12 vel aliter quia equi 5 comedunt sextana 6 in diebus 9 [illegible] equi come-
dunt duplum [illegible] sextanam 6 in totidem diebus. Cum 10 equi sint duplum equorum 5 [illegible] quia
10 equi comedunt sextana 6 in diebus 9 [illegible] comedunt sextana 16 in diebus 12 quod
[illegible] 16 in 9 divisa per 12 [illegible] 18 [illegible]
proportionum [illegible] in signum [illegible] prima monstrantur. Sic itaque
[illegible] a. sit [illegible] b. [illegible] c.
sit [illegible] coniunctio [illegible] prima [illegible] d. b. [illegible]
[illegible] prime coniunctionis [illegible] quemque numerum
[illegible] duo illorum antecedentes et duo consequentes.
[illegible] proportionum [illegible] 9 [illegible] prima [illegible]
[illegible] proportionum [illegible] ex primo antecedente et primo [illegible]
[illegible] consequente [illegible] ea proportio quam habet

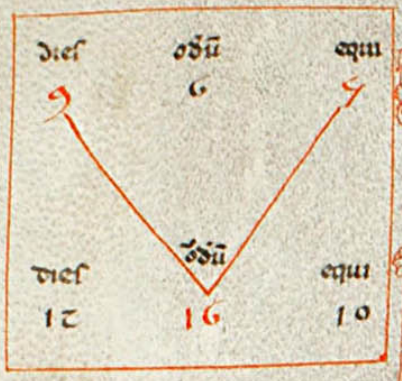
primum antecedens ad secundum consequens. Et ex proportione quam habet secundum antecedens ad primum
consequens. Non enim mutantur facta ex antecedentibus neque ex consequentibus cum non facta
numerum faciant composita proportionem que componitur ex duobus antecedentibus et ex duobus conse-
quentibus predictis. Vel proportio unius cuiusque numeri secunde coniunctionis ad unum quemque numerum
prime est composita ex quattuor reliquis numeris quorum duo sunt antecedentes et duo consequentes
non fuit alia 9 combinatio. Et nos ostendamus compositionem proportionis primi numeri e. ad
f. esse compositam ex quattuor reliquis numeris ex quibus numeri d. b. sunt antecedentes. Reliqui a. c. sunt
consequentes quod probabitur ita quia ex multiplicatione numeri e. in factum ex numeris a. c. s. de 16 in quibus 9
in quibus 4 diuisa per factum ex numeris d. b. prouenit numerus f. Et similiter factus ex numeris
d. b. per f. equabitur multiplicationi e. in factum ex numeris a. c. quia proportionaliter est sicut factus ex
numeris d. b. ad factum ex numeris a. c. ita e. ad f. quia numeri d. b. ut dicitur antecedentes et a. c.
sunt consequentes. Componitur ergo proportio e. ad f. ex proportione d. antecedentis ad a.
consequentem et ex proportione b. similiter antecedentis ad c. consequentem. Vel proportio e. ad f. componitur
ex permutatis proportionibus s. ex ea quam habet numerus d. ad numerum c. et ex ea quam habet b. ad a.
quod etiam demonstrabo in numeris alio modo. Quoniam est sicut 10 ad 4 hoc est sicut numerus d. ad numerum c.
ita factus ex numeris b. d. ad factum ex numeris b. a. hoc est sicut 10 sunt ad equos 4 ita equi
60 sunt ad equos 30 ita sextaria 60 sunt ad sextaria 30. Rursus sicut 6 sextaria sunt ad
9 dies hoc est sicut b. est ad c. ita factus ex numeris a. b. ad factum ex numeris a. c. hoc est sicut 6 sex-
taria sunt ad dies 9 ita sextaria 30 sunt ad dies 45 quia est sicut d. ad a. ita sextaria 60 ad
sextaria 30 et sicut b. est ita sextaria 30 ad dies 45 quia proportio ordinis ad dies est sicut 60 ad
45 quia proportio ostensa est composita ex ea quam habet d. ad a. et b. ad c. quia est sicut 60 sextaria
ad dies 45 ita sextaria 16 sunt ad quesitos dies s. numerus e. ad numerum f. et sic proportio
e. ad f. ostensa est composita ex d. ad a. et ex b. ad c. ut oportet. Similiter ostende-
tur e. ad f. composita esse ex a. ad c. et ex b. ad a. et sic habemus unam combinationem.
Similiter potest ostendi quod e. ad f. componitur ex reliquis quattuor numeris. Ex quibus rursus numeri
d. b. sunt antecedentes reliqui autem e. a. sunt consequentes. et est multiplicatio facta ex numeris a. c. in numerum
c. s. 720 equalis multiplicationi facti ex numeris d. b. antecedentibus in numerum f. et sic habetur combina-
tio secunda. Et ideo ostendetur a. qui restat ex prima coniunctione compositi ad f. ex quattuor
reliquis numeris quorum numeri d. b. sunt antecedentes et reliqui s. a. c. sunt consequentes et sic
habetur combinatio tertia. Et sic ostensum est quod proportio unius cuiusque tamen numerorum prime con-
iunctionis ad numerum s. qui est unus ex tribus numeris secunde coniunctionis componitur ex duabus propor-
tionibus reliquorum quattuor numerorum. Rursus supradicta ratione queritur quot equi comedant
sextaria 16 in diebus 12 describe in quo ordine sub ordeo et dies sub diebus et diuides
numerum facti ex tribus numeris prime compositionis s. 720 per reliquos duos numeros s. per 12
et per 6 exibunt 10 pro quesitis equis. In hac autem questione supradicto modo potest exempla ostendi quod pro-
portio quam habet unus quisque numerorum prime coniunctionis ad 10 qui est alius numerus secunde componitur
ex duabus proportionibus reliquorum quattuor numerorum quorum antecedentes sunt 12 ad 6 s. numeri
f. et sic habetur tres alie combinationes in hac questione.

Et si proponatur quod equi 10 comedant sextaria 16 in diebus 12 et queritur quot sextaria

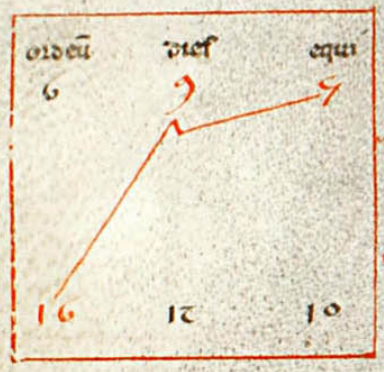
et sic equi 60 sunt ad equos 30

est ad

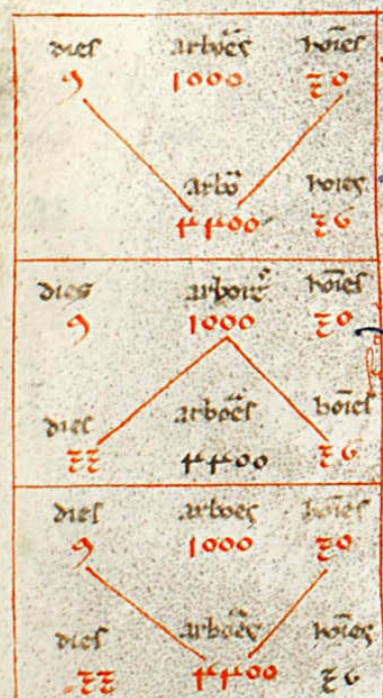




comedēt eq̄ 4 in dieb⁹. ⁊ ō m luc q̄e ōdc̄ ētus mīg sede quīctōis. q̄r relīq̄ duo nūi cōe q̄unctōis. s. 10 q 12 er duūsoīes iq̄bz duūdel 22 o q̄p ēntur ee 4 uīabz 16 eabt sectana ordi 6 ut m luc ētia dīcp̄te ostedit. in qua ēssime pōt cognosa q̄ ꝓportio unī cuiq̄ nūi p̄me q̄unctōis ad 6 q̄ē ttī eorūdē sedē ē ꝙpōita ex duabz ꝓportiōibz q̄ttuor relīq̄rū nūoꝝ. ex q̄bz antecedentes sē 10 q 12 relīq̄ duo sē ꝙsequētes. ⁊ sic bīnē notāe ꝙmutatōis. Relīq̄is uō ⁊ ꝙmutatōis inuentis cognōīt ꝓportio unī cuiq̄ tū nūoꝝ sedē q̄unctōis ad unū. quēq̄ tū nūoꝝ p̄me. q̄ ꝙpōitēs fuīt ex duabz ꝓportiōibz q̄ fuīt ante relīq̄s ⁊ttuor nūōs ꝓme q̄unctōis. q̄ quēlīt ꝙmutatōe ex ante dētis duo ecētūs p̄me q̄unctōis. Et notādū q̄d nullus excēdēt sec nūs hūīt ꝓportiōm ꝙpōti ad aliq̄e nūm siue sue q̄unctōis ꝓportiōibz ordinalīz relīq̄rū. ⁊ sunt ille ꝓportiones duodecim.



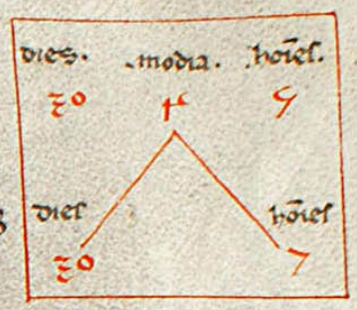
Si m q̄ōibz sup̄dictis ponēt dies in medio eq̄ 4 ordeū ut hīc alia ge ecētūs. Et nūl p̄me q̄unctōis erit 4 ⁊ 9 q 16 relīq̄ ecēt nūi q̄unctōis sedē q̄d cognoscēs. im ponat ut sic ignot nūs in līeis lineę. ⁊ q eq̄ 4 comedēt aliq̄n de tū nūis tū ordi. s. sectana 6 in dies diebz. s. m ⁊ ge equi 10 wadē ordeū comedēt i diebz $\frac{1}{2}$ $\frac{1}{4}$ q̄ p̄uenīūt ex mīcōe 4 in 9 duūsa p 10 Rursus eī in diebz $\frac{1}{2}$ $\frac{1}{4}$ eq̄ 10 comedēt sectana 6 q̄nē ēt sectana comedēt in diebz 12 erg sic $\frac{1}{2}$ $\frac{1}{4}$ sē ad 6 ita 12 ad q̄situ nūm ordi. Et mīcanda sē 12 p 6 q duūcenaq p $\frac{1}{2}$ $\frac{1}{4}$ q̄ sic nūs ad nūm ita decupl⁹ unī ad decuplū alt̄. similr̄ cauūm ge p 10 mīcantōm 8 12 i 16 bē q mīcēnī 10 uīabz 12 uīabz 6 ⁊ sūma q̄ē 720 duūsecīm p̄ decuplū 8 $\frac{1}{2}$ $\frac{1}{4}$. s. p 4 ⁊ 9 q̄ sē mīsupīoāli nea uenīūt 16 p nūō ūgīo ordi. q̄r similr̄ūs 4 p 9 uīabz 16 eq̄bīt mīa tōi 8 10 uīabz 12 uīabz 6 ⁊ sic 4 ⁊ 9 q 16 facīūt p̄mā q̄uēctōm. Reliquū. s. 10 ⁊ 12 q 6 facīūt sīm. vñ si aliq̄s expdīcī sec nūs fuīt ig̃r q̄ē uolūs inuenīre uīs excp̄e nūō 8 quali fuīt q̄uēctōe. q̄r in relīq̄s duobz nūīs sue q̄uēctōis duūsel facīa eētbz nūīs relīq̄ q̄uēctōis ⁊ inuenīes q̄ fuīt nūm.



Ilquēd plāntīe q̄dā rē mīsit boīes 20 D boīb⁹ qui plātāt arboēs i p̄mā die ut plantarēt arboes i ea q̄ plātauerūt ibi arbores 1000 i diebz 9 q̄ fuīt ante boībz 36 iq̄r diebz plātauerūt arboes 44000 sēpt siquīd boībz 36 sub boīb⁹ 20 ⁊ arboībz 44000 sub arboībz 1000 ut m luc dīcp̄te ēnūt. oībz boies 20 p arboe 44000 ꝙ ecūī sūmā p die 9 ⁊ duūsetīa sūmā p boies 36 ⁊ p boes 1000 eabt 22 ⁊ in tot diebz ipi boīes plantabīt arbores 44000 D eodē rsus h eāt quīd boībz 36 q̄r arboes sīa manēs plantauerūt in diebz 22 dīcp̄ta q̄ē ut b ostēdit. oīb⁹ boies 36 ⁊ arbores 1000 ⁊ die 22 in unū ⁊ duūtes p boīes 36 ⁊ p die 9 eabūnt arboes. 44000

Tanīq̄ūt q̄r boīes plantauerūt sīa rōne arboes 44000 in diebz 22 dīcīb⁹ q̄ēdā ut b ostēdit ⁊ oīb⁹ boies 20 ⁊ arbores 44000 ⁊ die 9 in unū ⁊ duūtes sūmā p 1000 q p 22 eabt boies 36 ut oportet. De hoīb⁹ qui cōēdē frumī

Hoīd q comodū modia ꝛ fruīa muno mīse. s. inchieb ꝛo vñ alīs homīes quer scire qt modia sufficer ei eadē mrā i etsōe dieꝝ ꝛo ꝺ scire hāt qōꝝ ur hoīes ꝺcr. Et mīb hoiel 7 p modia ꝛ q pdict ꝛo q sūt mīb hoīes hūea. q duplet sūmā p hoiel q q pdict ꝛo qui sē in supiori linea. Vñ relinq; q mīb ꝛo nec duplet p ꝛo q mīb; cō 7 p ꝛ q duplet p q erit modia ꝛ q Et sc alq; ideo possum hūc qēm. qi ei etiā q ꝺ uno q hūt sepe mīt mercatores cum qtio. qr eam tenaci memorie cōmēda. ut sc al in simlib; qōb; opm.



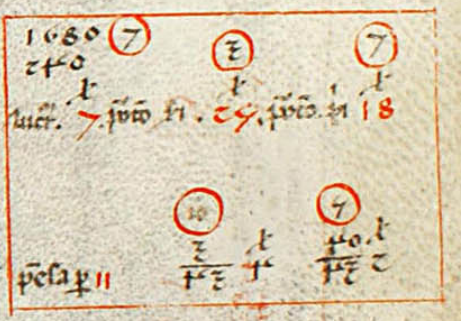
Vnaq; sp̄ōtl fuit ꝺ equb; ꝺā ꝓcep̄ capīt ꝺcm ꝺ loc et tantus ꝙ loc. qui in simul secer. quor; unusq; facit ꝛr ō locos quisq; in eq̄ suā portē in ipa secta et hūt. q ēt pā so eta te aliq̄ q̄ntitē lucrati fuīt. qa q̄ntitatē mīse fm portes eor ꝺuidē uolunt. Et uolūt sc q̄ unusq; ꝺ ipo lucro ti ger. pē portē p̄mi loci in capite tabule in tercā parte. ꝺcm medē linea iuxt sinistā. portes aliorū p ordinē ponē sc̄ād. q lucrū q̄ fit in alio capite tabule in eadē linea ꝺpingat fm sinistā in dcā parte. ꝺ hīc aggr̄ portes oīum locor; mutuō. q aggregatū sūmā q̄ab. In q̄ singlē ꝺuides mīes portes unī cuiusq; loci in totū lucrū. q sic habeb; q̄ unusq; ꝺ ipo lucro ongit. Et ut h apparet ꝺclarē. p̄mū in secta te duor; hoīm ī p̄ma parte q ui in su. q tuor in tria. cū uarū pōtonū portes ꝺuos habuīt ꝺ mq̄nta pāte duplices. q̄dā mīor; ī portes rupior; ad modum sc̄a tanum trianguli.

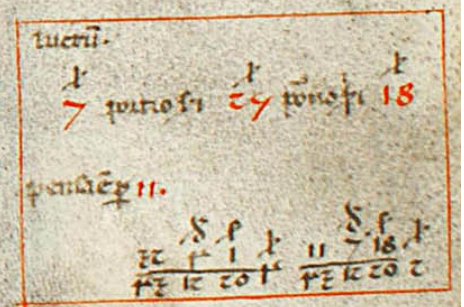
ꝺ loca te duor hominum

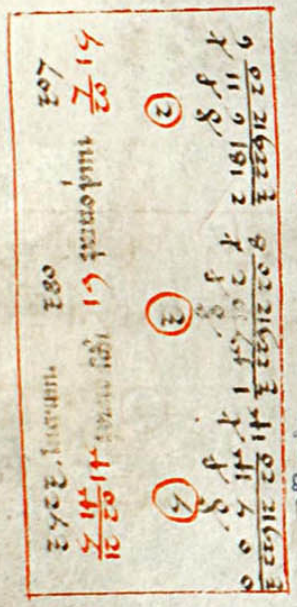
Supponat ꝺ duob; hōb; q̄ sc̄a te simlr̄ fec̄. Quor; unus fuit in p̄ ma sc̄a te. ꝛ li alius mīor. Et alē fuit in eād. ꝛ q lucrū fuer ī ꝛ li 7 Et q̄nt q̄t unusq; ꝺ ipis lib; 7 o tingit. Pic tres ꝺ sc̄a portiones p̄mi sc̄ī. h ē. ꝛ li in capite tabule in dcā parte. ꝺ in alius simlr̄ in ea tē linea. ꝛ q ꝺ sc̄a lucrū ca. ꝛ li. 7 tercū alius simlr̄ sepat ab ipis ad libi ai pē. ut h mīus ostēdit. Et iungit insimul portes utriusq; sc̄i ꝺ sc̄a li ai q et ꝛ q q pē q q̄ē sub li 8 q p̄mule ẽgulā sup nāt ꝛ q alia ꝛ q ai ẽgla pē sub q ut in q̄ē ostēdit. Dcm mīa portionē p̄mi sc̄ī. s. li 8 plucrū inde dcā. p 7 et ꝛ q q duplū p ꝛ q q q̄ pōta fuit sub li 8 ecabē lib ꝛ q 7 tertū q̄ngit p̄mo sc̄o ꝺ ipo lucro h ē. ꝛ q sol li 8 q ꝺ ꝛ q Relicū uō lucrū cō tingit alī. Tam ut fm hāc artē oper. ostā portionē alīus sc̄ī plucrū s. ꝛ q p et ꝛ q q duplū p ꝛ q q pōta sc̄ī sub ꝛ q ecabē l ꝛ q 7 tm q̄ngit ꝺ. s. l. q ꝺ duplū ꝛ q ai quib; simul q ꝛ q sol li 8 q ꝺ ꝛ q 7 q o tingūt p̄mo inēsdem labus 7 duobus.

ꝺ eodem

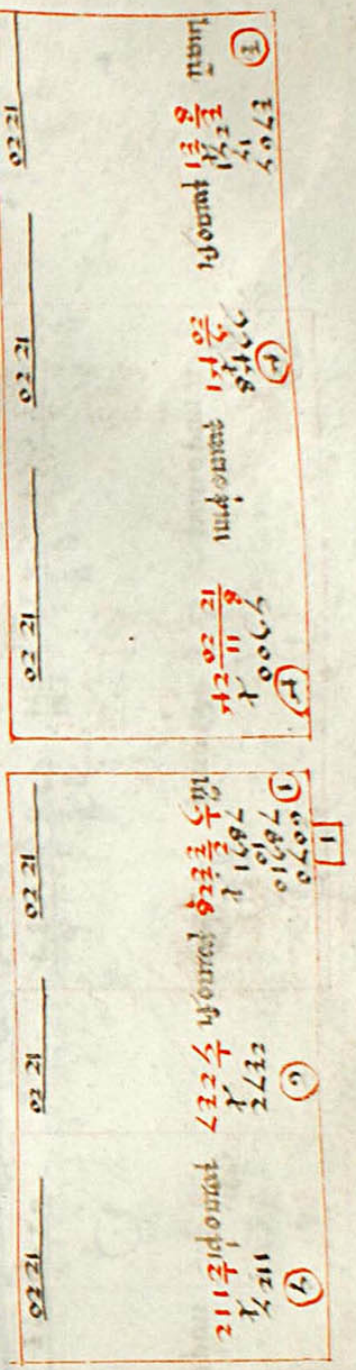
Alīs uō sc̄a te possum. ꝛ dcas q ꝺ o tingūt unusq; ꝓ pē sui locū in loc ai ut sc̄a in una mīa tē 7 una ductione sicut in p̄cedēt ib; exēplo ostēsum. q ē h q ai debet mīare lucrū p portiones ui cuiusq; 7 duabē p ꝛ q mīa p̄mū lucrū. s. 7 p ꝛ q q p ꝛo hē p ꝛ q ꝛo ꝺ q 7

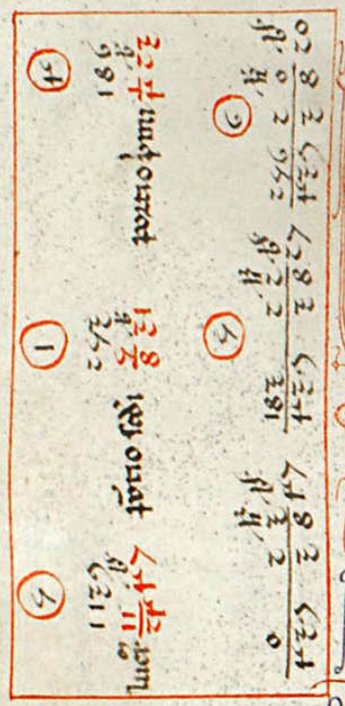


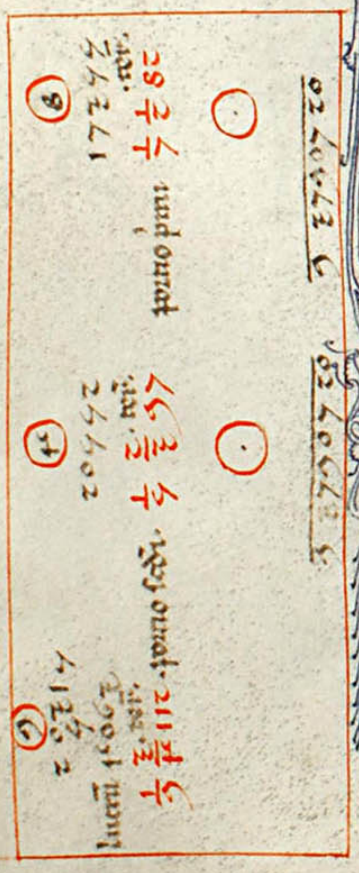




Decodem







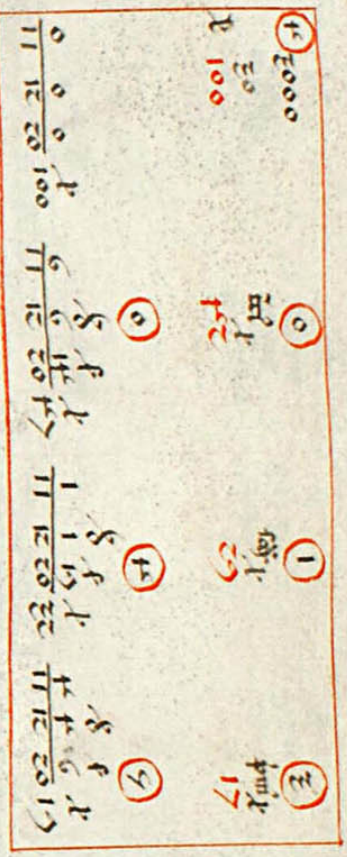
ꝑmu cū dñus ꝛ q̄ fuit ſr 12 d' ugla ſedi er dm 10 quoꝝ ꝑē ſup 12 ⁊ adde ſol. 14 qui fuit ſr 20 d' ugla ꝑmu cū 0 q̄ē ſup 20 d' ugla ſedi er ſol'. 14 quoꝝ ꝑē ſr 20 q̄ ſt̄ magnitudo ugle poſite ſub ugla lucri. dñi adde lubras 104 cū lib' 222 er libre 228 q̄ ſt ꝑē au ugłam ſub lucro. ⁊ ſic habeb' pecuniā collectē libr̄ $\frac{10}{12}\frac{14}{20}$ 228 hē lib' $\frac{1}{8}\frac{2}{7}$ 228 ut in eoꝝ lucro ꝓpoſitū fuit

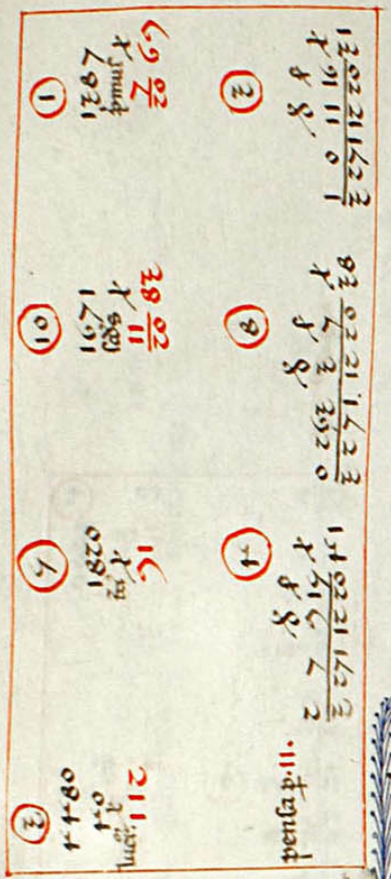
Tem duo hoies ſocietē fecer. quoꝝ unus mutuauit bizantios $\frac{1}{7}$ 22 alt̄ uo mutuauit bz̄ $\frac{4}{8}$ 21 q̄ lucrata fuer bz̄ 147 ⁊ damnos 11 hē bizantios $\frac{11}{24}$ 147 q̄rē q̄ntum unicuiq; d' ꝑtis lucri ⁊ dampni debeat. Ne ſcire q̄em ut h' oſtendat. Et mlta bizantios 22 p ſua ugula er quarte 42 quoꝝ debēꝫ mlcare prupati ugle altius ſcau. ſ. p 8 ſq; unūp tuptus utriuſq; ſcau reputur in ecco ñ oportet mlcare 42 n̄ eō p q̄ tam d' ecco. ſ. p 2 er eccum unū bizantū. 186 q̄ ſt ꝑē in q̄e ſr $\frac{1}{7}$ 22 Tē mlca 21 p ſua ugula er eccue 242 ſilr unū bizantū q̄ cū ſint eccue ſicut 186 alt̄ ſcau n̄ oportet eas mlcare p ruptū ꝑmi ſcau ut p aliquā partē ipius. n̄ ꝑē 242 ſup $\frac{4}{8}$ 21 Et ent cē tal' q̄ſtio. q̄d unus illoꝝ mutuauit 186 ⁊ alē mutuauit 242 poſtmodū eā alē repute 186 ⁊ 242 uidelicz ut unus d' $\frac{1}{7}$ 78 $\frac{4}{8}$ in q̄libet anno in nullo repiant̄. ſ. in ecco in quibz mlcat $\frac{1}{7}$ 22 er ut ꝑdictum 186 Tē mlcat $\frac{4}{8}$ 21 p 8 er ut dictum 242 q̄re addes 186 cū 242 er 428 inq̄bz cū ea reatur regula duodecz mlcationē d' 186 in toto lucro. ⁊ habeb' portione lucri ꝑmi ſocii. q̄ ſic ſit mlca bizantios lucri. ſ. 147 p ſua ugula. bē p 24 q̄ adde 11 er bizantii 1179 quoꝝ mlca p 186 er 2118144 q̄ duuc d' 428 q̄ 24 bē p $\frac{1}{428}\frac{00}{18}$ exhibit $\frac{240}{428}\frac{20}{18}$ 20 ut in q̄one oſtendit. Tē eōdē modo mlca 242 p 1179 q̄dam d' ſumā eccū p $\frac{1}{428}\frac{00}{18}$ ⁊ habeb' portionē lucri altius ſcau ut in queſtione ſub eodem oſtenditur.

De eodem

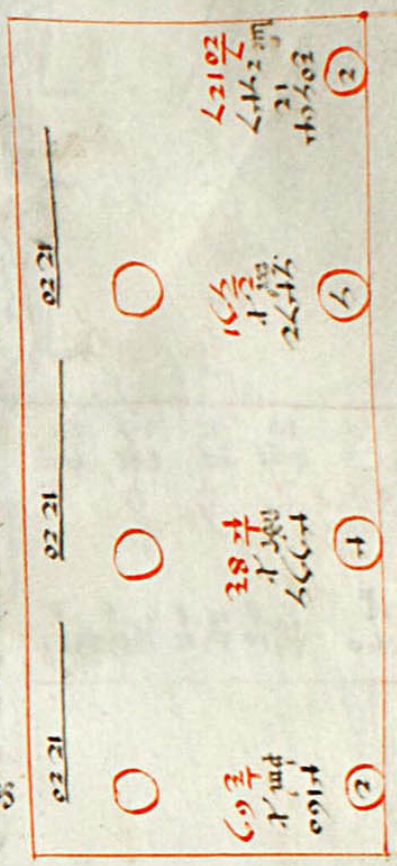
Tem fuer duo hoies ſocietē quoꝝ unus mutuauit tarenos $\frac{1}{7}$ $\frac{1}{2}$ 82 Et alē mutuauit tarenos $\frac{1}{4}$ $\frac{2}{7}$ 97 ⁊ lucrata fuer tarenos $\frac{1}{2}$ $\frac{2}{7}$ 112 dicitur q̄em ut h' oſtendat. Et mlbus lucrū. ſ. 112 p ſua ugla. er 1067 q̄ ꝑē ſr ipius lucri. Dem mlca portionē ꝑmi ſocii. p ſua ugla er q̄tuor decime 1147 q̄ ſt mlca p ruptus q̄ fuit ſub ugula altius ſocii. bē p 7 p 4 ut p 14 er duocentesime decime 17144 Eadē q̄ una mlca portionē ſocii ſcau. ſ. 97 p ſua ugla er q̄dragesime 1467 q̄ mlca p ruptus q̄ fuit ſub ugula ꝑmi ſocii bē p 7 p 7 ut p 14 er ſili' duocentesime decime 20447 Quas ꝑē ſup $\frac{1}{4}$ $\frac{2}{7}$ 97 ⁊ ſcias q̄ ido fecim duocentesimas decimas d' portionib; alioꝝ. q̄ m 210 repiunt eoꝝ. ⁊ ñ poſſunt mutuū malā munere nullo. q̄ rupti ñ bñt ad mutuū aliquā communē regulā. Ergo ꝑmi mlcat 17144 Et alē mlcat 20447 Quare addes 17144 cū 20447 er 37907 In quo nullo ⁊ in ruptus q̄ fuit in lucro debeꝫ dupliciter q̄ ſi ponant in una ugla faciēt $\frac{1}{4}$ $\frac{0}{7}$ $\frac{0}{7}$ 907 Sz q̄ cū lucro ē ex ordinatē mutuū. neceſſarium ē ut habeas 210 ruptur ugle cum ſuis. Quā cū habē totū d' ꝑtū ugla in poſſis. q̄ ſca in habeꝫ eccm in eō $\frac{1}{7}$ multoꝝ nullius lucri. ſ. 1067 p 4 er 20214 q̄ ꝑē ſr 1067 ⁊ addes $\frac{1}{4}$ inuentā duodecimoꝝ ⁊ facies $\frac{1}{20}$ de

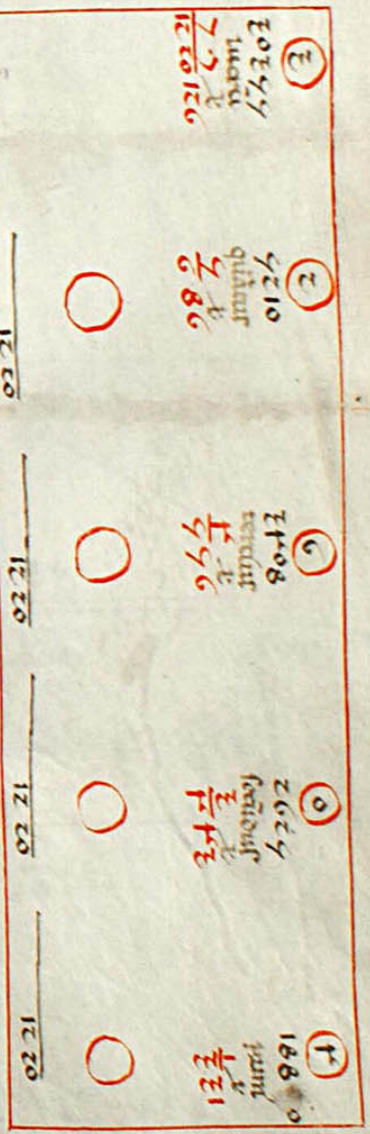
qđ $\frac{1}{20}$ q̄ é mūgla. Et p̄ē ipām $\frac{1}{20}$ in capite ūgle. ⁊ sic habeb̄ in ipa ungula
$\frac{1}{5}$ $\frac{0}{27}$ $\frac{0}{907}$ $\frac{0}{20}$ quā ūgulā p̄ē sub p̄mo scio. ⁊ alia fili sub scdo. dim̄ mlcab
20214 p 17744 ⁊ dum del p regulā p̄im̄ sub p̄mo. ⁊ habeb̄ portiom̄ lucri p
milcai. Jtē mlbis eađ 20214 pmiim̄ scdi scii. s. p 20442 ⁊ dumd̄ p regulā
p̄im̄ sub eo dē portiom̄ lucri illi ut in q̄one ostendit. De societate tū hoīm
Tres hoīes societatē fecer. Quoru p̄mus mulit. lib 17 scds lib 29 tertius lib 42
⁊ lucratu fuer lib 100 p̄mū diebz q̄ibz ut h ostēdit. dein adde portiones illoru
iimū. s. lib 17 ai 29 ⁊ ai libras 42 et libre 88 qbz 88 repies regulam q̄ $\frac{1}{8}$ $\frac{0}{11}$
⁊ milbis portiom illi cuilz scdi ī luctu ⁊ dumdes p $\frac{1}{8}$ $\frac{0}{11}$ ⁊ habeb̄ portiom lucri tū
genē umcuq. Nā si libre ⁊ sol' ⁊ dē umcuq; d luctu orīgētes in una milcē
⁊ una dumlcē repire uolum̄. Jnuenes illd qđ é minus d $\frac{1}{12}$ $\frac{0}{20}$ mūgula
dumlcm̄ pdicte. s. in $\frac{1}{8}$ $\frac{0}{11}$ in q̄ ai ñ habeal n̄ tm̄ $\frac{1}{8}$ de pscpns $\frac{1}{12}$ $\frac{0}{20}$ minut
albi $\frac{1}{20}$ mīt utrūq;. Vl qa $\frac{1}{12}$ $\frac{0}{20}$ ē regla tāor uni libre. s. d 240 dumd 240
p 8 exabīt 20 qđ ē ꝓbm̄ q minuit t de $\frac{1}{12}$ $\frac{0}{20}$ ut pdixim̄ q si omisem̄ mus
ai $\frac{1}{8}$ $\frac{0}{11}$ habebm̄ $\frac{1}{11}$ $\frac{0}{12}$ $\frac{0}{20}$ Qr mlbis lucrū. s. 100 p 20 ut siam augent 20 in
dumlcē. ita augentē in milcē er 2000 quē pē sup 100 in q̄e ⁊ milbis libras
17 p̄mi scii p 2000 ⁊ dumdes p $\frac{1}{11}$ $\frac{0}{12}$ $\frac{0}{20}$ exabīt lib $\frac{4}{11}$ $\frac{4}{12}$ $\frac{6}{20}$ 19 Jtē milcai libras
29 scdi scii p 2000 ⁊ dumd̄ p $\frac{1}{11}$ $\frac{0}{12}$ $\frac{0}{20}$ exabīt libre $\frac{1}{11}$ $\frac{1}{12}$ $\frac{19}{20}$ 22 q̄s pē in q̄e
sub scdo. s. sub 29 dim̄ milcai 42. s. portiōe ei scii p 2000 er 12 6000 q dumd
p $\frac{1}{11}$ $\frac{0}{12}$ $\frac{0}{20}$ exabīt libre $\frac{6}{11}$ $\frac{6}{12}$ $\frac{14}{20}$ 47 q̄s pē in q̄e sub 42 s. sub tio scio. Nā
si portiom̄ lucri uni cuilz in unū p regulā colligē uolum̄. Facies scdm q supi
dmonstratum̄ in societatib; duoz scioz uidelicz ut pdix $\frac{1}{11}$ $\frac{0}{12}$ $\frac{0}{20}$ sub 100
s. lucro. dim̄ colligē 6 q fuit sup 11 in mūgla lucri ei scii. ai uno qđ ē sup 11 in ū
gula lucri scdi ⁊ ai 42 qbz fr 11 in mūgla lucri p̄mi er 11 q dumd p 11 q fuit sub
ūgula posita sub 100 exabit m̄ 1 ⁊ remanet 0 pē 0 sup 11 ⁊ sua in manu ai
quo ūge 6 ⁊ 1 ⁊ 42 que fuit sup 12 oium tm̄ ūglaz facier dē 12 quos dumd
p 12 q fuit sub ūgla posita sub 100 exabit sol' 1 ⁊ remanet 0 pē 0 fr 12 et reti
neal in manu sol' 1 ai quo ūge sol' 42 ⁊ 19 ⁊ 6 qui fuit sup 20 eandē tm̄ ūr
glaz er 40 q dumd p 20 exabit lib 2 ⁊ remanet 0 pē 0 fr 20 ⁊ libras 2 retine
al in manu ai qbz ūges libras 42 ⁊ lib 22 ⁊ libras 19 que simt ai pscriptas
uel ungulas. erūt libe 100 ut oportet. De eodem
Tres fuit treg hoīes. quoz uni mlit lal $\frac{7}{20}$ 69 Et alē mulit lal $\frac{11}{20}$ 82 tertius quaq;
mulit libal 91 ⁊ lucratu fuer libal 112 describe q̄em ut h ostēdit. ⁊ tē facies solidos
d portiōe uni cuilz scdi sic milcēs 69. s. portiom̄ primi scii p suā ūgulā. bis p 20
⁊ sup addes 7 er sol' 1387 quos pēs sup libal $\frac{7}{20}$ 69 Qđ si fecerit d portiōe
scdi habeb̄ fr ipām solidos 1671 Similr milcai libras 91 p 20 ut faciat sol' eorū
er sol' 1820 quos pēs fr libal 91 Et nota qđ si in portiōibz capitat nūerus
ut erā ī alīq ipaz ponatur dēti. ai ipis libs oporteret facē dēos exponendo
uni cuilz scdi siam in hac qđ fecerim sol' ex una quaq; portiōe. pter solidos q fr





cū lubus ꝛpop. Ergo mī mlur ſolidos 1287 Alē ſolidos 1671 tanꝰ ſolidos 1820
cē addos pſēptos ſolidos munū. cē ſol' 4878 Cuī nūi regla bē $\frac{1}{2}\ \frac{0}{6}\ \frac{0}{271}$ Dlaz
cū opteat bīe mapie ūglē duūſioīs $\frac{1}{12}\ \frac{0}{20}$ 7 eccas ñ balcam mīpū ungla
ñ tō $\frac{1}{6}$ ſcāl' ꝰ mmur nob' $\frac{1}{2}\ \frac{0}{20}$ bē 4 o ecpīs $\frac{1}{12}\ \frac{0}{20}$ pēs ḡ 4 o ſīt lucū. et
mlt' 4 op ipīy lucū. ſ. p 112 cē 4 4 80 q pē ſup 4 o 7 capiab' $\frac{1}{2}\ \frac{0}{20}$ mūgula
duūſioīs ſic $\frac{1}{2}\ \frac{0}{211}\ \frac{0}{12}\ \frac{0}{20}$ quā ungulā pēs ſub uno quoꝝ oſcto 7 mlcabꝰ
4 4 80 p 1287 7 duūdꝰ p $\frac{1}{2}\ \frac{0}{271}\ \frac{0}{12}\ \frac{0}{20}$ cabīt p portōe lucī pmū ſcāi. t
$\frac{1}{2}\ \frac{0}{271}\ \frac{11}{12}\ \frac{16}{20}$ 12 Jē mlca 4 4 80 p 1681 7 duūdꝰ p $\frac{1}{2}\ \frac{0}{271}\ \frac{0}{12}\ \frac{0}{20}$ cabīt lulē
$\frac{0}{2}\ \frac{0}{271}\ \frac{0}{12}\ \frac{0}{20}$ p portōe lucī ſcōi ſcāi. Silr ſimlcāndo 4 4 80 p 1820 7 duūſeꝝ
p $\frac{0}{2}\ \frac{0}{271}\ \frac{0}{12}\ \frac{0}{20}$ habebī portiōm lucī ſui ſcāi. Poſſumꝰ cīa alīt portiōy lucē tāi
bōꝝ cerpēdo portiōy reliq̄ repīre. undecūq; ut addas 1 q̄d cē ſīt ꝫ mungla
pīma ſcāi cū o q̄d cē ſīt ꝫ o mungla ſcāi ſcāi cui 1 aq̄ uſq; ad ꝫ q̄ ſub ūgula tāi
duūſ 2 q̄ pone ſīt ipīy ꝫ 7 pcepto ſcēdi tīano retineas in manu 1 q. 1 cē $\frac{1}{271}\ \frac{0}{12}\ \frac{0}{20}$
unī lubo. ḡ ad [illegible] 1 cū o q̄d cē ſīt 271 mūgula pīmi ſcāi 7 cū 262 q̄ ſūt ſup
271 mungla ſcōi cē 264 a q̄ uſq; ad 271 duūſ 7 q̄ pōe ſup 271 d ūgla
tāi ſcāi. q [illegible] 271 retinēdo ſcēdū tīanū in manu. q̄ unusq; cō
$\frac{1}{12}\ \frac{0}{20}$ unī lubo. [illegible] 1 q̄ addas cū 11 qui būt ſup 12 d mungla pīmi ſcāi. 7 ad
dūoꝝ ꝫ q̄ſūt ſīt 12 ſcōi cē dūi 14 a q̄ uſq; ad duplū 12 ſ. ad 24 d ſūt dūi 7
q̄ſ pōe ſīt 12 d ūgla tāi ſcāi. q̄ pcepto duplo d 12 retinēdo in manu 1 q̄ſt $\frac{2}{20}$
unī lubo. bē io 1 cū q̄ uſq; ad 16 q̄ ſūt ſīt 20 d mungla pīmi ſcāi. 7 cū ſol' 7
qui ſūt ſup 20 d ūgla ſcōi cē ſol' 24 a q̄ uſq; ad ſol' 40 ſ. ad duplū d 20 d cē
ſol' 14 Et nota q̄ nō dicim' a 24 uſq; ad 40 q. 24 ſūt plus 20 uī ſi cēnt pīs
q̄m 40 quēadmō dicim' a q̄ cēt a b ipīs uſq; ad duplū d 20 7 ſic intelligas d
omīb; ſimilīb;. Pēs ḡ ſol' 14 ſīt 20 d ūgula tāi ſcāi. 7 pcepto duplo
20 retinēdo in manu lubos 1 Cui q̄bz addas lubos 21 pīmi ſcāi cē lubos 28 ſcōi
cē lubo 71 a q̄ uſq; ad ſūmā lucā. ſ. ad lubos 112 d ſūt lubi 141 q̄ſ pōe cui ūgula
tāi ſcāi. Et habebō in portiōy lucā ipīus lubi $\frac{2}{2}\ \frac{7}{271}\ \frac{14}{12}\ \frac{0}{20}$ 141 ut in q̄e oſtēdi.
Nam ſi ſup ſēpta oīa placuīſſ. placb' ea p modū ꝓpoſ ponēdo. q. cui portiōz
lucā ultīmi ſcāi ꝫ portiōēs lucā reliquorū inuenīē. nequaquā ꝫ reliquū mo
dū ſimulꝰ q̄ꝝ placuīſſ potuīſſ. Ebt cui penſa lucā pīmi ſcāi ꝫ p 11 ſcōi 8 tāi 4 ut ſī
ipīs portiōibz in quēstione reperīt De eodem
Et ſupponat' q̄d pīmi ille cui mīſſi lubas $\frac{1}{2}$ 69 ſecūdi lubas $\frac{1}{4}$ 87 tēti lubas $\frac{1}{4}$ 91
ſit lucrati cēnt lubos $\frac{7}{20}$ 127 d ſēpta q̄e utiq; oſtēdūt. poteꝝ duobz modis pdē.
Ꝑ pīmū quidē reperiat' miꝝ in quo ſit rupta qui poīta ſuit in portiōibz capiat'
ipōz. ſ. $\frac{1}{4}\ \frac{1}{4}\ \frac{1}{2}$ q nūi ſē 60 p quē mlca una quāq; portiōne. ſi $\frac{1}{2}$ 69 7 habebīs
ſup ea 4 160 7 $\frac{1}{4}$ 87 habebī ſīt ea 4 99 4 7 $\frac{1}{4}$ 91 7 habebī ſīt ea 4 4 72 vt p alium
modū mlca 69 p ſuā ungłam bē p 2 q addo 1 ea 208 q mlca p 4 q 4 q ſīt
ſub ūgut' ea ſimulē 4 160 Jē mlca 8 2 p 4 4 q addo 1 ea 2 2 2 q mlca p 4 q
ſub ūgula tāi ſcāi. ea 164 4 q mlca p 2 q ſuīt ſub ungła pīmi ea ſimulē





quarti scdi mlcū 86 p 6 7 adde 4 ē sexte 721 quas mlcū p 4 7 p 7 sup̄
stū dmonstrauē ē sexagesime 7210 ut paluū modū septū fiat. dnde
adde q̄ttuor reptos nūos in unū. 7 optabilis fm qđ supi decuit. 7 sic habeb̄
portacōs q̄ orangūt as dlucid ut mq̄one supi ostēdit. De eodem
Quattuor hoies fuer. exq̄bz pm̄ misit ½ uni integri Alē misit ¼ ttius
¼ Quarto uo misit ⅙ 7 habuer̄ misim̄ sol̄ 60 q̄r quot unicuiq; exces
orangit. Fuer uō q̄sdo ē ai dr̄ d q̄ttuor hoīb; qui emer̄ portū p sol̄ 60 ex
q̄bz pm̄ uoluit habē ttiū illi porca. Scds q̄rtū. Tertius q̄ntū. Quart̄ sextū.
Vii quidā ipsis ai pm̄ p̄tia parte porca psoluat sol̄ 20 7 scds p quarta pr̄
te sol̄ 14 7 ttius p q̄nta parte sol̄ 12 7 quart̄ p sexta parte sol̄. 10 7 oēs insim̄
uer̄t ū faciunt nisi sol̄ 47 minime quōmō remanēt ad psoluēdū ꝑ ꝛ
ceptū ꝑ 60 7 quer̄ q̄s eorū ipsis sol̄ ꝛ soluē debeat. Non ein̄ dixer̄t qđ ipi
q̄ttuor hoies ñ emer̄ totū portū ai ⅙ ¼ ⅓ ½ uni integrū ñ faciāt unum
integrū imo remanet exces 1/20 Quare d sol̄ 60 remanet silr̄ ungesima eor̄
pars. s. ꝑ. ꝛ Vñ si ceūt tres hoies exq̄bz pm̄ emerer̄ dimidiū illi porca 7 p
solueret ꝑ 20 Et alē emeret ttiā 7 p soluēt ꝑ 20 7 ttiū emet quartā 7 p soluet
ꝑ 14 Et sic habent̄ insimā ꝑ. 64 bē sol̄. 4 mag̃ d sol̄. 60 q̄ sol̄ 4 sūt duo
decima pars d sol̄ 60 Et b orangit qr ⅓ ½ ½ faciūt 1/12 magis integro Vnd
ñ p soluat̄ plus ut mm̄ d sol̄ 60 oportet ut emptores q̄ntacūq; fuīnt emāt
tales portōes. q̄ cū mimis redacte fuīnt faciāt unū integrū. Vbi gr̄a si
emptores fuīnt duo. unus emat dimidiū. 7 alius aliud dimidiū. Vel unus
½ alius ½ 7 sic d inceps. Et si fuīnt tres unus q̄sq; emat ttiā partē. uel pm̄
emat ½ scds ½ ttius ⅙ Et si fuīnt q̄ttuor emat unus q̄sq; quartā partē. uel
pm̄ eor̄ emat ½ scds ⅓ ttius ¼ quart̄ 1/20 7 sic poter̄ intelligē d plib;. Nam
ut p̄cepit sol̄ 60 dubitandē inē q̄ttuor sōs hoies. ita ut nichil ei remaneat
dicde q̄dam ut h ostēdit. 7 ucd d ⅙ ¼ ⅓ ½ in quali nō repiant̄. Reputē
eūi in 60 q̄r ½ q̄ē 20 pē fr̄ ½ inq̄ē. Et quartū. s. 14 pē fr̄ ⅓ 7 q̄ntū. s. 12
pē fr̄ ¼ Et sextū. s. 10 pē fr̄ ⅙ Vñ dicos qđ pmus mulr̄ 20 scds 14 ttius
12 quart̄ 10 Vñ adde eos i unū ē 47 inq̄bz duos mlr̄om uni cuiq; stor
q̄ttuor nūor insolidis 60 Et sic habeb̄ p portōe pmi hois sol̄ 1/19 21 bē sol̄ 1
7 12/19 uni dēti. Et p scdi portōe solidos 14/19 14 bē sol̄ 14 7 dr̄ 2/19 9 Et p ttii
portōe ꝑ. 12/19 12 bē ꝑ 12 7 dr̄ 11/19 7 silr̄ 7 p quarti portōe habeb̄ sol̄ 10/19 10 ut
supi inq̄ē ostendit. q̄ sol̄ 10 7 dr̄ 6/19 6 Quibz q̄ttuor portōibz repts. si
cal munū quinq̄ insimis insolidis sol̄ 60 diuidat̄. Incipit capitulū undecimū d mo

Oneta quid dicat̄ quelibz dnōr quantitat̄ solamē moētar
7 efficat̄ equalitas argēti 7 cal ymixtiōe. Maior aū moneta
dr̄ in cui libra fuit plus argēti quā mea q̄ fieri dēbet. Mi
nor uo inq̄ minꝰ. Moneta d solan dicat̄. q̄n pondē in libra ipsi
alig data argēti q̄ntitat̄. Et aī dicam habeo mōy. ad uē. q̄ntitatē ut dica

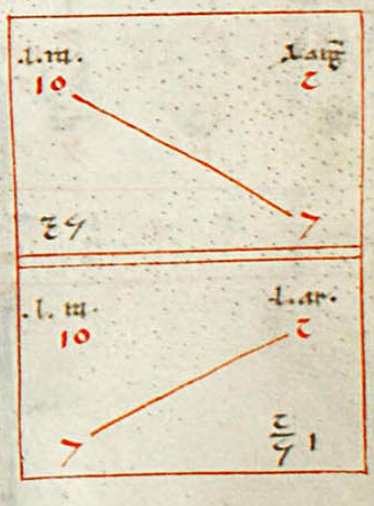
ꝑ	10 quārt 1/6	12 ttii 1/4	14 scds 1/3	20 pm̄ 1/2
60				

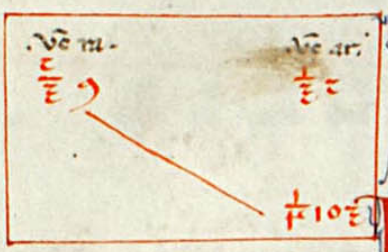
ꝑ					
0/15	60	10/15	10	12/15	12	14/15	14	17/21	1

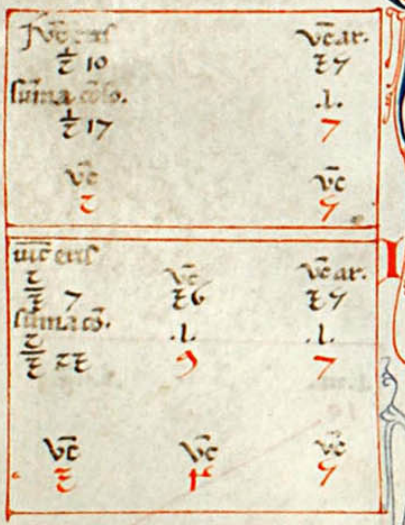
mus ad z intelligim' qd' in libra ipl' monete habem' unc'. z argēti. Cō
solat' ēm mōeta ibz modus. Primꝰ modꝰ ē qn ꝙsolat' ex data qntitate argē
ti ut' ens. Sedz cū ꝙsolat' exqbzlibz datus mōetꝰ ai argēti ut' ens ut' utrꝰ
q; adducē. Tertiꝰ qn ex data monetaꝙsolat'. q oīa ut in ō capitulo
pcedte ostensū ipīm modꝰ fit. Quartꝰ dupl'. q; pma erit d ꝙsolamine
monete. ex data argēti ut' ens qntitate. Sedā erit d ꝙsolamine mq; mōete
ponūt qntitatiue. Exqbz alia mōeta mformat' in aui libra mīa argēti
habeat'. quā in ꝓpoītꝰ mōetꝰ. Ad ꝙsolam fine ad ducē aīa ee n pōt.
Tertia ai monete silr ponūt qntitatiue. q uolues exes facē monetam
aui libra sit plus argēti quā in pā. q; fine adducē argēti ee n potest.
Quarta ai mōete ponūt fine qntitate exqbz uoluens facē aliqua pōtā
quātitatē ai libz mmoz mōete ai adducē ens. Quinta ai monete
ponūt silr fine qntitate. exqbz uolūs facē aliqua pōtā quātitatem
ai libz maiozis monete ai adducē argēti. Sexta quidē diffiā ē d ipis
mōetis q; st' mmoz z maioz illa moneta quā uolūs facē. qd' ꝙsolam
fit fine ens ut' argēti adducē. Septima ō diffiā ens. de regulis ad
consolam ptinentibz

Differena ꝑma

Quida bt libras z argēti. exqbz uult facē monetā aduncas z argēti in libra.
z uult seruare qntitatē totī ꝙsolammis nec ī z ens ucionē. Ex libris qd z
argēti fiet ucias. et unc' 8ꝫ quas duuid ꝑ unc' z stas. erabt ꝫ z tot libr
monete. et in ista ꝑcepta ꝙsolammis. Vbi gīa ai inqualib; libra mōete.
oportet unc' z ee argēti quotes uc' z fuīnt in uncis 8ꝫ totes libra una
mon potest ꝙsolari. et illis uncis 8ꝫ argēti. Sut enī uc' z in ill' unc' 8ꝫ
quadragies bis. Vna ista ꝙsolatis ē libre ꝫ z ut ꝑdictum. Exqbz exctis
ꝑceptis libris z argēti remanēt ꝑ unctē aīa libre ℥ 4 Illud q; in qlib; libra
debet ee unc' z argēti. intelligi qd ē ab illis ucias 12 usq; in libra. sc' 10
ens iudē libra d argento. hec d mane. Vna quibzlibet ucias z argēti qs bt.
oportet ponē in ꝙsolamine unc' 10 ens ꝑ qd z in libris z argēti. ponis
libras 10 tantis. Vn reducē h qstio ad modū negotiationū. videlicet ut
ponas libras z argēti. q libras 10 tantis in una linea. q libras 7 argēti
quas ipse bt. ponis sub libris z argēti. ut sit argētū sub argēto. ut h
ostendit q intelligas z p 10 q st' exercitio. q duuid ꝑ z erabt libre ℥ 4 ens. cui qbz
adde libras z argēti. et fiet lib ꝫ z ꝑ summa totī ꝙsolammis. Na si st' libre
z ens d mane. ponis ipis libras z sub libris 10 .s. tante sub tanto. ut
in hac patet d ceptō. q intelligas z p z q duuides ꝑ 10 q exibit libra $\frac{z}{4}$ 1 argē
ti. ai q; accipias libras z tantas. et fiet summa totī ꝙsolammis libras $\frac{z}{4}$ 8
Illud. q; in qlib; libra dicte monete sūt uc'. 10 tantis. quotes unc' 10 sū
et in libras z .s. tunc' 8ꝫ totes libre una exibit in summa ipī ꝙsolammis. q;
duuides 8ꝫ ꝑ 10 exibit lib $\frac{z}{4}$ 8 ut ꝑdictum. exqbz exctis libris z tantis. re







manet argenti. lb 1

De eodem

Item si ponat q̄ quidā habeat libras 8 7 unc̄ 7 argēti exq̄bz unle facte
monetā ad unc̄ 7 mlibra. 7 q̄ut̄ sūma solaminis nec ti 7 erg ad unciam
fac̄ sol. 7 unc̄ libras 8 7 unc̄ 7 et unc̄ qual dimd̄ unc̄. 7 hē
mlia 10 p 12 qu 12 12 unc̄ et 12 7 mlaū 7 p 12 et
in quib; unc̄ 12 7 exbt libre s. libre 7 unc̄ 7 sūma dict̄
solaīs. exq̄bz extract libras 8 unc̄ 7 argēti remanebūt ex eis lb 7
7 ſ. libre exhaust unc̄ 7 argēti exunc̄ unc̄ libre s. dīr remanebūt unc̄
7 sēdz q̄ unc̄ 7 argēti ſ unc̄ 7 erg. 7 sub unc̄ 7 pēr unc̄
argēti. sub argēto. 7 mlaū 7 p 10 7 dimdz p 7 exbt unc̄ erg
q̄ sūt libre 7 ub 7 ut p alīm modū inuenim. eī q̄bz addē libras 8 7
7 argēti et in sūma tot̄ solamīs libre 7 unc̄ 7

De eodem

Item si ptēpta libre 8 7 lib 7 sūma exeat 7 uoluīs scire sūmā solamīs
argēti unciales mlaū 10 p 7 dimdz p exbt argenti unc̄
8 q̄ sūma tot̄ solamīs. Valet dimd̄ 10 p exbt libre 10 7 unc̄
8 unc̄ et 12 libre 10 7 unc̄
8 sic habebim̄ p sūma dict̄ solaīs libras 10 7 unc̄
8 ut prediximus.

Incipit differentia sda

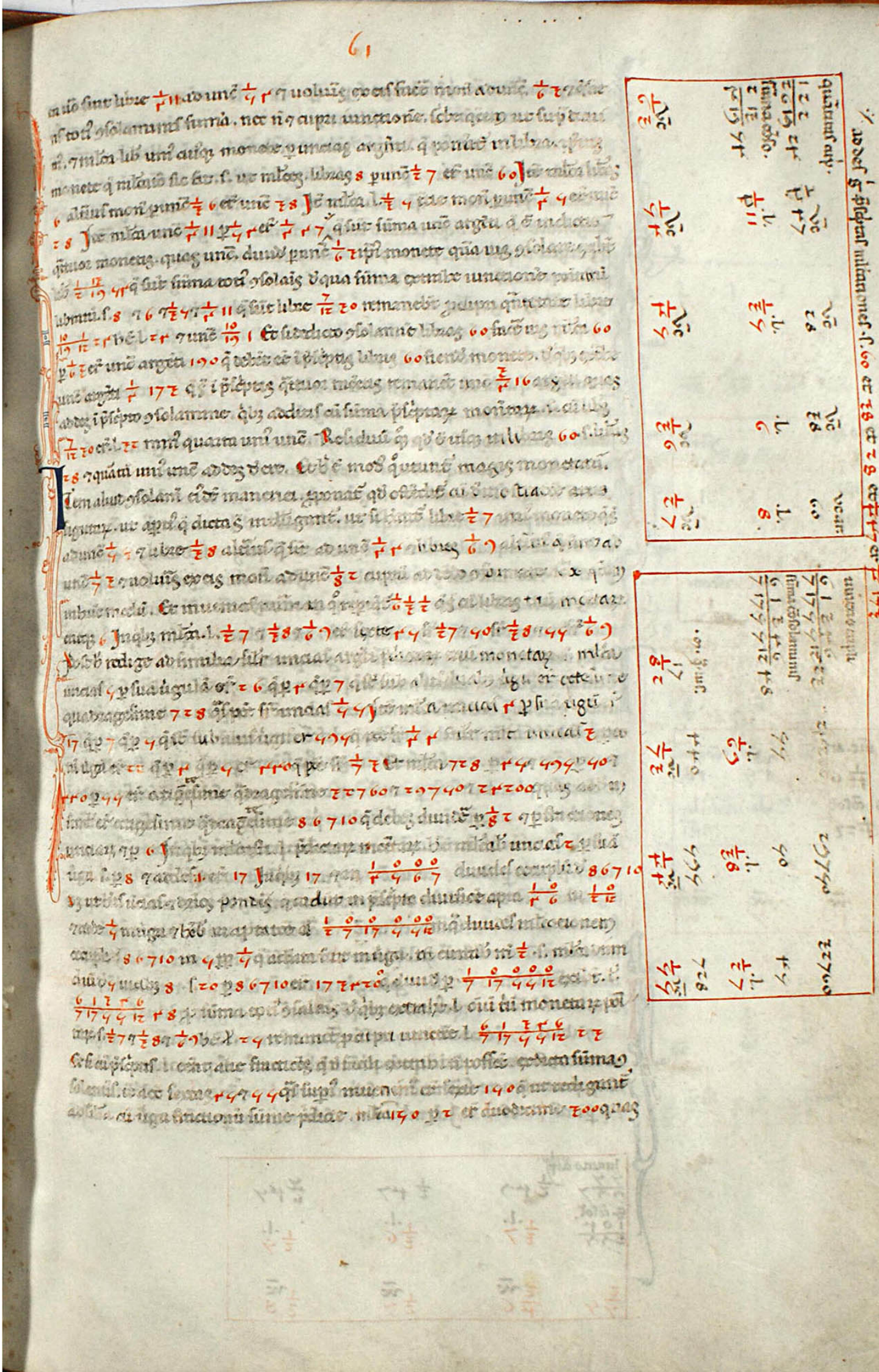
Item si bine libras 7 moī. q̄ adunc̄ 7 exq̄bz unle fac̄ monetā ad unc̄ 7
sūma solaīs sūma 7 erit ad unciam. 7 dēz q̄ sub libris 7 unc̄ 7 argēti q̄ sūt
mina q̄ solā 7 mutemus unc̄ argēti q̄ ſ illi libris 7 ſ. mlaū 7 p 7
unc̄ 7 7 ex argenti ē i pcepta libris 7 q̄ unc̄ 7 pēr ſ libras 7 exq̄bz
q̄ unc̄ 7 argēti posuit solam tot̄ lib. moī. ad unc̄ 7 q̄ut̄ unc̄
mutemus unc̄ 7 dic dimd̄ 7 p exbt libre 17 sūma dict̄ solaīs exq̄bz
extract libras 7 sūt ir manebūt libre 10 p cupa unciales.

De ade differēt

Item si binis libras 7 ad unc̄ 7 unc̄ 7 ad unc̄ 7 alterius. ex
uolui scire mlaū ad unc̄ 7 argēti addēdo simatē. 7 q̄ut̄ unc̄
argēti ex in tot̄ solaīs ēmutande. Sic fac̄ ordina q̄libz dict̄ mlaū mōī
mlaū libras 7 p 7 et 7 libras 7 p et 7 ad unc̄ 7 et 7 hē sūma
unc̄ argēti q̄ ē in libris dictis utriq; moī. q̄ dimdz p unc̄ 7 ipſi moī. q̄
ma fac̄ exbt libre 7 q̄ sūt libre 7 7 q̄ sūt sūma tot̄ solaminis. 7 q̄ exbt libre
7 ſ. libre remanēt lb 7 q̄ sunt sūma unciales argēti.

De eode regula

Item si mihi mlaū solamine ex uē q̄ttuor ut̄ p̄z duplē monetā p̄manēt
gētī unc̄ q̄ sunt i oīb; ipſis monetis ad dict̄. q̄bz dimdz p unc̄ argēti q̄
sūt in libra ipsiz monetā q̄a nos facē sūma tot̄ solaīs ēmutandos. de
q̄ sūma extract libras moī. q̄ in solamine p̄mūt. argēti ad unciales reb
q̄ unc̄. Vbi gīa. habē mi solamine q̄ttuor monetā. q̄rum quar sūt libre
8 ad unc̄ 7 7 q̄rta ut̄ libre 6 ad unc̄ 7 6 q̄rta ut̄ libra 7 4 ad unc̄ 7 q̄rta



mlām p relīq̄s unc̄os. q̄ ꝫ sub ūga. s. p 4 q̄p 4 q̄p 17 q̄p 7 et̄ 8 or 40 ꝫ extrah de
177 r 200 remanēt 81 r 1700 q̄ duud p $\frac{1}{7}\ \frac{0}{17}\ \frac{0}{4}\ \frac{0}{4}\ \frac{0}{12}$ exhīt p argēt uncīāl.
$\frac{6}{7}\ \frac{1}{17}\ \frac{7}{4}\ \frac{r}{4}\ \frac{6}{12}$ ℥ ut sup̄. Veni si d̄ dicto ꝯsolāīe. l. 60 aī adiūcē argēti. et
eīs ꝯsolāte uoluīt. ꝯlām 60 p $\frac{1}{8}$ ℥ ut hāt argēti q̄d erit necessariū m mpīs. l. 60
et̄ actuīe ipī uncīe 1020 q̄s mlām p actuā d 81 r 0. s. p 104 et̄ centesīmo q̄
dragesīme 107 100 d q̄bz exhīe centesimaſ q̄ dragesimaſ ecūiaſ 86 11
q̄ ꝫ argēti mpl̄ptus. s. p̄dicti ꝫ monetaꝫ remanēt argēti centesīme q̄d
gesīme exhīaſ ℥ 0 ℥ 9 0 q̄ debēnt duud p 81 r 0 ut remtegrent. ſz ut hāz dā
as ponder q̄ ꝫ as mlām 10 7 1 0 $\frac{27}{7}$ et̄ 101 9 4 aq̄ duud p 81 r 0 7 p 4 hēt p
$\frac{1}{7}\ \frac{0}{r}\ \frac{0}{6}\ \frac{0}{4}\ \frac{0}{4}$ 7 q̄ exhīt et̄ uīe d q̄bz ut fiāt. l. addes 12 sub ūga exhīt. l.
$\frac{2}{7}\ \frac{0}{r}\ \frac{4}{6}\ \frac{1}{4}\ \frac{1}{4}\ \frac{0}{12}$ ℥ hēt ℥ 9 d 1 ponder q̄ cārube 4 q̄ $\frac{2}{7}$ unī gumm q̄ tīn deter ad
di d argēto q̄ addē aī p̄l̄ptus monetaſ. et̄. l. $\frac{2}{7}\ \frac{0}{r}\ \frac{7}{6}\ \frac{1}{4}\ \frac{0}{4}\ \frac{0}{12}$ 7 relīduū d̄ē usq̄
m 60 addes d argento. q̄d relīduū uenes eī $\frac{4}{7}\ \frac{3}{r}\ \frac{0}{6}\ \frac{7}{4}\ \frac{11}{4}\ \frac{0}{12}$ ℥ p modū d mon
strātū in sec etatibz aī p portōem lucrūnī secū portio altīus inuenīt. hac

Vida hīt libāl 9 mon. q̄ē ad unc̄ ℥ ex q̄bz uult facē monetā differēcia ℥ia
ad unc̄ 4 7 q̄r sūma ꝯsolaīz 7 argēti adunctio. In hac aī dissā. tame q̄ē
in moneta pōta ē ꝯsidāndū. q̄r exhīte uīe ℥ d. l. remanēb unc̄ 10 7 tot
unc̄ eīs suīt in qualibet libra dicte monete q̄r pōz 10 sub libraſ 9 7 mlāb 10
p 9 et̄ 90 7 tot unc̄ eīs ꝫ in illīs libraſ 9 q̄s unc̄. duud p unc̄ argēti q̄ suīt in
libraſ mon. quā ꝯsolate uz. s. p 7 q̄ quotiēs unc̄ 7 sē in unc̄ 90 totiēs
una libra exhīt unc̄ 90 ꝯsolāte pteīt. exhīt libre $\frac{6}{7}$ 12 plūma totī ꝯsolaīz
exq̄bz exhītes libras 9 remanēt $\frac{6}{7}$ ℥ p argenti uncione. De eodem

Tem si huīz libraſ 8 alicuī monete q̄ sit ad unc̄ 6 7 libāl 9 altīus q̄ sit ad
unc̄ 7 7 uoluīz exeīs ꝯsolate monetā ad unc̄ 8 argēti ad dendo. 7 q̄s iers
totī ꝯsolaīs sūma. nec il 7 argēti adductē uncione. acē unc̄ argēti q̄ suīt
in una q̄q; mēta. 7 eīs in simī unge. q̄r sūma p unc̄ argēti fiende mē
te duud 7 q̄d exdunsiōe puenīt. erit sūma totī ꝯsolaīz q̄ fuīt faciendaꝫ.
Vid abunc̄ 6 argēti q̄ ponēt in libra ꝑeīs poīte monete. usq; in unc̄ 12
s. in. l. q̄r delīt. dsub cū unc̄ 6 7 tot unc̄ argēti ponēt in libra ipī dicte mo
nete. q̄s mlām p libraſ 8 et̄ unc̄ r 8 7 tot unc̄ argēti m pl̄ptus libraſ 8 ē
cognoscaſ. Jē illud idē fac d alia moneta 7 repies ē in ea unc̄ r 4 argēti q̄
si uncie cū unc̄ r 8 sūmīt. et̄ unc̄ 9 ℥ q̄l duud p unc̄ r argēti q̄ suīt in
moneta quā tu uis facē exhīt libre $\frac{1}{r}$ ℥ q̄ suīt sūma totī ꝯsolaīz d q̄ sū
ma exceīs libraſ 8 7 9. s. 17 p argēti uncīāe libre $\frac{1}{r}$ 6 remanebīt. De eod

Tem habes. libāl $\frac{1}{2}$ 4 unī monete q̄ē ad unc̄ $\frac{2}{2}$ ℥ argēti. 7 libraſ $\frac{1}{2}$ 6 adūc
$\frac{1}{2}$ r 7 libraſ $\frac{1}{2}$ 7 q̄ē ad uc̄ $\frac{1}{r}$ 4 7 uis facē ex eīs monetā ad unc̄ $\frac{2}{4}$ 6 argēti
ad dendo 9 formare. uīd argēti q̄d ē in libra unī cuiq; monete in libra.
nāq; prime monete suīt unc̄ $\frac{1}{2}$ 8 scde uō unc̄ $\frac{1}{2}$ 7 7 tēie $\frac{2}{r}$ 6 ꝯsolāte usq; l.
$\frac{1}{2}$ 4 p unc̄ $\frac{1}{2}$ 8 et̄ $\frac{4}{6}$ r 4 Jē mlām l. $\frac{1}{2}$ 6 scde monete p unc̄ $\frac{1}{2}$ 7 et̄ $\frac{1}{2}$ r 7 Jē

Juncto āgeti		ūc eīs
$\frac{6}{7}$ ℥		90
.9. ꝯsol.		.l.
$\frac{6}{7}$ 12		9
ūc. eīs	ūc. m.	
7	10	

ūc. ar	ūc	ūc. m.
$\frac{1}{r}$ 6	r 4	r 8
.9. ꝯsol	.l.	.l.
$\frac{1}{r}$ ℥ ℥	9	8
ūc	ūc	ūc eīs
r	7	6

Juncto āgeti			
$\frac{7}{7}\ \frac{7}{7}$ 7	$\frac{1}{2}$ r 9	$\frac{1}{2}$ r 7	$\frac{7}{6}$ r 4
9. ꝯsol.			
$\frac{10}{7}\ \frac{r}{7}\ \frac{5}{5}$	$\frac{1}{2}$ .l. 7	$\frac{1}{2}$ .l. 6	$\frac{1}{2}$ .l. 4
$\frac{2}{7}$ 4	$\frac{2}{r}$ ūc 6	$\frac{1}{2}$ ūc 7	$\frac{1}{2}$ ūc 8

6 z

mlca lubaſ ½ 7 titie mẽto p unẽ ½ 6 ei unẽ ½ 7 ½ 7 ad de tres ꝑlẽptas mlcas.
mſimꝫ eſt unẽ ½ 11 z qſ duno punẽ aupa qſt in.l. ipſi mẽto quia uſ facẽ
.ſ. p ½ 4 exibit ꝑ ſuma tou ſolaſ lb ½ ½ ½ z 6 a qbꝫ extrahaſ lubaſ ½ 4 7
½ 6 7 ½ 7 remanebꝫ p argẽti unctione.l ½ ½ 7 Cogitio uꝰ argẽti uel
Tem ſi trũ ut pluſ qñtitatel.l. ut unẽ alqꝫ tame uũgi debat ꝫ qui ſolaẽ
moñ. in ſolaẽ ꝓponat̃ in qbꝫ ſt maiorel 7 minores excea moneta quia uo
luiſſ facẽ. 7 utrũ argẽtũ ut el adlere debeaſ ſare uoluiſſ argẽtũ uncias
aiarũ mẽtiꝫ. Ac. 7 duno eaſ p unẽ argẽti unã libre ipſi monete q
ui ſolare. 7 ſi ſũma q excrerit maior. lubꝫ oũ mẽtiꝫ ent. argẽtũ opor
tet adungi. 7 ſi minor ent adlendũ ẽ argẽtũ. 7 ſi minor nec maior fuit.
nec argẽtũ. nec argentũ debet adungi. Vbi gr̃ habeo lubaſ 7 moñ. ad unẽ.
z 7.l. 8 ad unẽ z 7.l. 10 ad unẽ. 6 7 uolo exeſ facẽ monetã ad unẽ. 4 In
iſtis nãqꝫ qttuor mẽtis ſuũt unẽ argẽti z 14 qual duno p unẽ 4 qſt in.l.
ipſi monete quã tu uoluiſſ ſolare. exbt.l. 14 z uinge utraqꝫ lb 7 cũ.l. 8
7 ai 10 7 ai 12 ei z 8 q ſuũt mtã d 14 z qr in dicto ſolaẽ addeꝫ argẽtũ 7 ſi
pluſ finſſet adlendũ eẽt utraqꝫ argẽti. 7 ſi z 8 equarẽt ad 14 z tũ nec argẽtũ
nec argẽti eẽt adlendũ ut ſupra dixim̃uſ. Differentia quarta

Sbuiſ moñ. ad unẽ 4 exequa uoluiſſ facẽ lubꝫ z 0 monete ad unẽ z argẽtũ
uidelicꝫ adlendo. 7 uoluiſſ ſare qñtũ mutteꝫ d ipã moneta. 7 qñtũ d argẽto.
Videl qñtũ argentũ debet eẽ in illaſ lubaſ z 0 fiend monete. ſ. unẽ 60 qr
mma qꝫ.l. debent eẽ unẽ. z argẽti. 7 biſ tot ginta faciũt 60 q unẽ 60 ar
gẽtũ ꝙ in libre 12 illi monete quã lubel ad unẽ 4 qr duplicꝫ 60 p 4 redit
12 7 tot mttel ex dicta moneta. Reliduũ uno q ẽ uſqꝫ in lubꝫ z 0 mutteꝫ
de argẽto. ſ. 18.

De eodem

Et ſi habuiſſ duas ſpecies maiorel excea quia facẽ uſ. qꝫ una ſit ad unẽ
7 alia ad unẽ 6 ex qbꝫ uſ facẽ unã libra monete. in q ſint unẽ 14 argẽti.
7 uoluiſſ ſcire qr unẽ ex una qꝫ miſeriſ. nec ſi 7 erſ aduictionẽ. hec aũ
ſcientia diffinitꝫ ſolaẽ explicare ꝓpoſſum. Primuſ qdẽ ẽ ut mutare eqlẽ
ex una quaqꝫ poteſtꝫ moñ. Sedẽs inequalẽ. Terũ ꝓportionalẽ. Vñ ſi in
ꝑcepto ſolaẽ equalẽ mutẽ uſ ex una quaqꝫ poteſtꝫ moñ. addeꝫ ũ
argẽta q ſt̃ mutinaqꝫ monetã. ſ. 7 ai 6 ei 12 7 mlca argentũ ipſius moñ
qua uſ punẽ 12. ſ. plubrũ una qua uſ ſolaſ. ei unẽ 14 8 qual duno p
dicta 12 exib unẽ. 2 ½ 7 7 ũ ponel d una quaqꝫ moneta. Reliduũ ꝙ ero
qd ẽ uſqꝫ in unẽ. 12 ſ. in.l. mutteꝫ d mme. ſ. unẽ. 8 ½ 14 d eode interdo ẽ
Am ſi equalẽ d una qꝫ moneta in ſolamme ꝑcepto eqlẽ d una quaqꝫ
mutẽ uſ. pẽ ut bis adlubrũ una libra excpũ monetã. q ẽ ad 6 unẽ.
7.l. z ex alia q ẽ ad unẽ 7 7 dcbe in qone unũ. ſi 6 7 z ſi 7 fm modũ
ſcãe dictũ. 7 mlcab 1 p 6 ei 6 7 z p 7 ei 14 7 pdẽꝫ 6 ſi 1 7 14 ſi z 7 adde eã in
ſimul ei z 0 d̃ mlca 14 p 12 ſ. unẽ argẽti quaꝫ ponẽ uiꝫ in.l. punẽ. qua

.l.	.l.	.l.	.l.
12	10	8	7
℞	℞	℞	℞
℞ 4	6	2	2

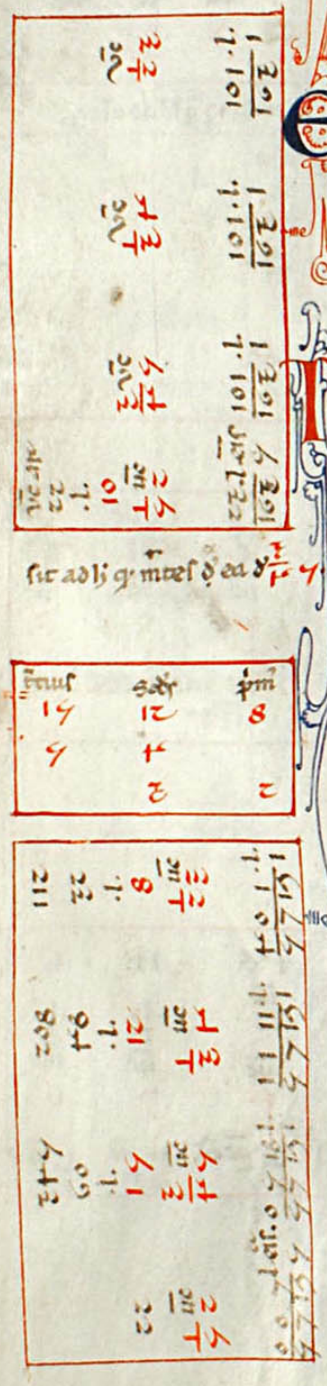
et.l. 12 q ſẽ ad unẽ. 7.

60	
.l.	
z 0	
℞	℞
2	4
.l. eſt.	.l. mo.
18	12

14 8	℞	℞
℞	℞ 2	℞ 2
12	12 2	12 2
℞	℞	℞
14	6	7

8 ℞ cto eſt
12 14

14 8	11	6
℞		
12	.l.	.l.
	2	1
℞	℞	℞
14	7	6
4 ℞ eſt	4 ℞	2 ℞
7	14	7



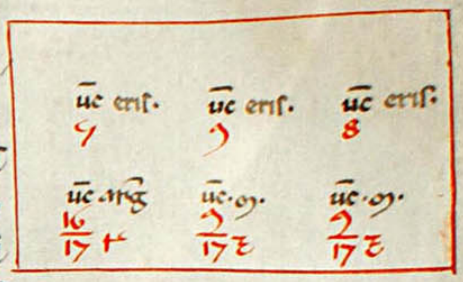
6z

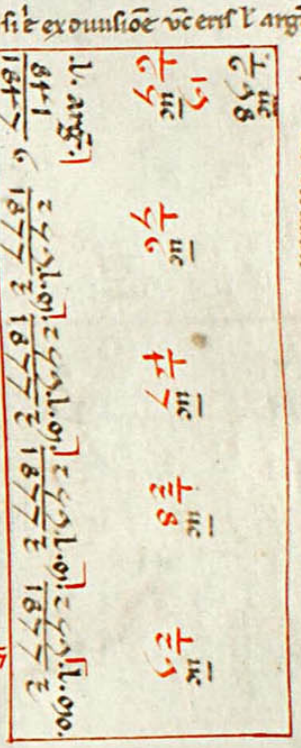
Ponacꝯ rcliq. Nã certũ fuerit ũ mcal ꝑ utrũq; uncaꝝ fuerꝭ ꝓꝑ ꝯ solã
q̃ mne gotiatoꝝ ꝺ monstrauim. **Differentia quĩta.**

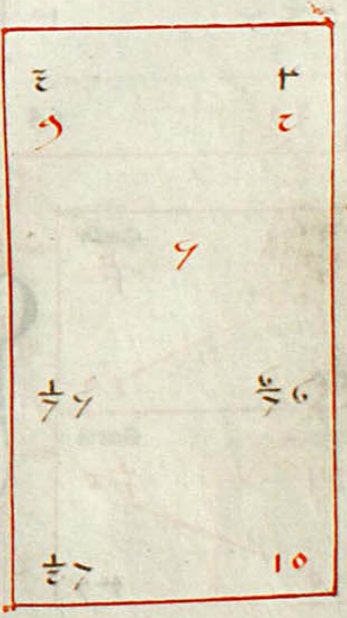
Sau moñ. mmoꝝ ꝓpoluit ut moñ. ad r ꝯ moñ. ad t argẽtũ mlibꝝ. q̃ uo
uult exꝑt mcal ulna i ad unc̃ ꝯ argẽtũ adendo ofoꝝnare. ꝯ q̃liꝫ u
nl aliq. nec il argẽtũ addusrꝭ q̃m unc̃. Jnb au solaꝝ ꝯ mlibꝝ opaꝝ
ci arpio q̃ ẽ ipoꝝ mcal sic opaꝝ ẽ ꝝ ꝑcelã dcm̃ ci argẽto. ꝺ bi gra ad
ꝺmlibꝝ unc̃ arpũ q̃ꝫ in una q̃q; moñ. Nã m moñ. q̃ ẽ ad r st arpu uac̃ s q̃
z ad r m 12 ꝯ m moñ. q̃ ẽ ad t st arpu unc̃ ꝯ ꝺ 17 Et milia unc̃ arpu sicꝺ
mõꝛ. l. ꝯ ꝓ ſuma ꝯ solaꝝ. l. ꝓ unc̃ 12 ei 60 q̃ duus ꝓ 17 exibꝫ unc̃ 2/17 z ꝯ tot
mutaꝫ ꝺ una q̃ moñ. Relidũ q̃ ẽ uꝫ ꝝ 12 unc̃ ꝺ argẽto ꝺ bi 16/17 r
Sau ꝺ ꝑcio solaꝝ. l. ꝯ facẽ uolũt. mne q̃ ẽ mlibꝝ moñ. q̃ꝫ unc̃
facẽ. l. ꝯ milia ꝓ libꝝ ꝯ ei. l. z ꝯ q̃ duus ꝓ 17 exibꝫ libꝝ 1/17 z ꝯ tot mutaꝫ
ꝺ una q̃ moñ. Relidũ uo q̃ ẽ uꝫ ꝝ libꝝ ꝯ ꝓꝫ ꝺ argẽto q̃ ẽ l. 14/17 z ꝺ
ꝑbare uolũt oĩa ꝑcta ſi bñ recta q̃ ſtauẽt. unũſcuiſ ꝺ rame. ꝺ argẽto.
q̃ mqualiꝫ ductaꝫ ꝯ solamuñ fuũt. ꝯ duus eaꝝ ꝓ ſuma ꝯ ꝺ solaũ ee ꝓpo
nunc̃ ſuenũſ. nec ꝓfuiſſe. absq; oi dubitatiõe cognoſci. **de eodem**

Tem ſi ꝓponaꝫ moñ. ad unc̃ 1/2 z ꝯ moñ. ad unc̃ 2/3 z ꝯ m. moñ. ad unc̃ 3/4 r ꝯ moñ
ad unc̃ 4/5 ꝯ uolũt exꝑt libꝝ 19 ad unc̃ 5/6 ꝺ argẽtũ adendo ꝯ ſtituo. q̃ ſ
be ꝺ unc̃. l. ſ. 8 12 unc̃ ꝓ ꝑcta ꝓ argẽtũ remanebũt ꝓ ꝓpoꝛ 1/2 ꝯ 2/3 8 3/4 7 4/5 6
q̃ꝫ uſimꝰ unc̃ ꝓ facũt 17/60 z i m̃q̃ ꝺ duus mlibꝝ erũ ꝓ ꝑcta monete i
ſuma ꝯ solaũ. l. ꝺ 1/4 6 m 19 exibꝫ libꝝ 2 477/1877 z ꝯ tot mutaꝫ ꝺ una quaq;
moñ. Relidũ uo q̃ ẽ uꝫ mlibꝝ 19 mutaꝫ ꝺ argẽto. q̃ ẽ. l. 8 81/1877 6
ꝺ auſare uolũt ꝺ 2 449/1877 ẽ ꝑcta ꝓ ſic̃ unꝰ libꝝ. mlia 2 449 ꝑ 12 ꝺ ꝓ unc̃ unꝰ libꝝ.
ei 1098 q̃ duus ꝓ 1 1877 exibꝫ unc̃. 12 781/1877 i Et ſi ſare uolũ ꝺ 12 781/1877 ꝺ ꝑcta
ſit unꝰ unc̃. mlia 12 781 ꝑ 12 ꝯ ꝺ ꝓ ſuma ꝓdit ꝺ unꝰ unc̃ 1077 4 q̃. duus
ꝓ 1877 exibꝫ ꝺ 7 12 2/1877 16 Jtuꝫ ait uꝫ q̃ ꝺ 2 449/1877 ꝺ ꝑcta ꝓcꝫ ꝺ 81/1877
ꝯ bala ꝺ ꝑcta fiet ꝓdꝰ. mlia 81 ꝓ 100 ꝺ ꝓ ſuma ꝓdꝫ ꝓdꝰ unc̃ libꝝ
q̃ 4 z 100 q̃ duus ꝓ 1877 exibꝫ ꝺ 7 12 1877 12 ꝯ q̃ꝫ unc̃ 4 ꝯ ꝺ 7 12 1877 ꝯ
Patet ait ꝺ ꝓpoſita ꝯ solaꝝ maqualiꝫ erũ ꝯ ꝓportionaliꝫ mtꝫ exꝑtas
monetaꝫ ſi ſecundꝫ ꝑcta q̃ꝫ ꝑcta ꝺ ꝑcta ſecꝫ. **Differentia sexta. xi. capli**

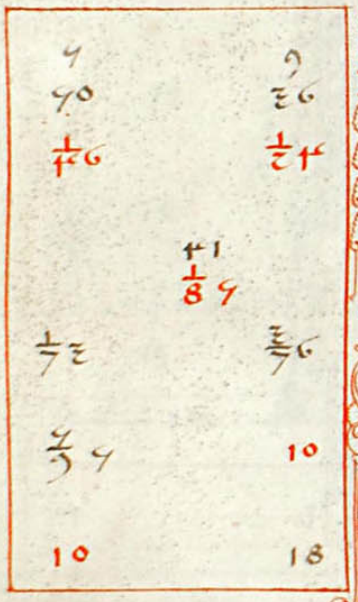
Squal buũc duaꝫ mẽtaꝫ q̃ꝫ una ſit maioꝛ. ꝯ alta mmoꝛ ꝺ moñ. quã
facẽ uult. potũ illud facẽ ſine ei ꝺ argẽto adiecto ſi ꝯpũt duabꝫ mẽtis
poluũt ꝓmutari ſcm nũm ꝺ ꝑtes q̃ adiecta argẽti ſiende monete iun
ctaꝫ argẽto ipſaꝝ duaꝝ mẽtaꝝ. Vbi gra. hẽt mẽta ad unc̃ r ꝯ mẽta ad unc̃
ꝺ q̃ꝫ uult facẽ moñ. ad unc̃ 4 Jũc ꝓpoꝛ r ꝯ mutã mei ꝯ ſub ipſis ite
uũꝫ ꝯ ꝺſcde ut i mãgine ad unc̃. ꝺ ni milliam q̃ ẽ ad r m 4. l. r ſi ꝯ pc̃ ꝯ ꝯt
ꝺfferiam q̃ ẽ ad 4 m ꝯ 1 r ſi r mutto ꝯ hanc ꝓpoſui. hẽ q. ꝺ mmoꝛ moñ.
mutaꝫ pãtaꝫ r ꝺ maioꝛ r Quia q̃ſtio habũdat ꝺ argẽto mlibꝝ maioꝛ
monete tñ ꝺ ſic ꝯpũt mlibꝝ r mmoꝛ Vbi gra ſi habũdat q̃ꝺ i una q̃

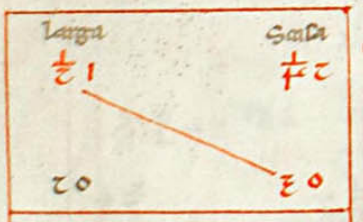






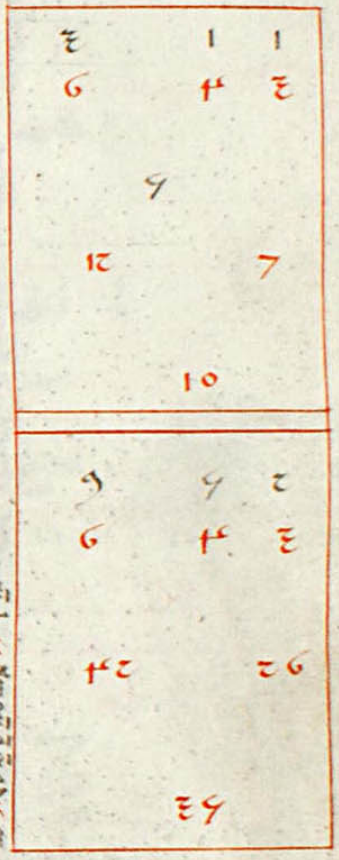
libra maiorꝭ moñ. unc̄ ℥ ſ. diffiñ q̄ ē ad 4m ⁊ q̄r ī lib̄ ℥ ſi hubūdauo d̄ ar-
gēto ꝑ lū d̄ ūcial ℥ ſ. ūcie 12 q̄ 12 puenit ex ℥ poīas ſi ⁊ ducas ī ℥ poſtu
ſi ℥ Et in libra q̄dē minoꝭ moñ. d̄ficiūt uc̄ ℥ argti. ſ. diffiñ q̄ ē ad ℥ ut
4 Et ī lib̄ ℥ minoꝭ d̄ficiūt d̄ argēto q̄duplū ūcias tū. ſ. 12 q̄ q̄ puenit
ex ducas ℥ q̄ ſ ſi ℥ ī ℥ q̄ ſ ſi ⁊ ℔ quotiēs mutat lib̄ ℥ d̄ minoꝭ moñ. tot
ſ lib̄ ℥ d̄ maioꝭ mittes. Sili quā partē ut partes mutis ex lib̄ ℥ minoꝭ
moñ. tanā partē ut partes libraꝝ tū mittes d̄ maioꝭ. ℔ portionalitē q̄dē
sic ℥ ad ℥ ita ꝙ mittit ex minoꝭ moñ. erit ad id q̄ erit mittendū d̄ maioꝭ
Vñ si ex ipō ⁊ solaris tm ūcias 12 ⁊ solaris uoluīt. ad tot mutim nuōs ꝑtes
ſ. ℥ ei℥ et℥ ⁊ mq̄bz duūd mitt̄ d̄ ℥ ī 12 ⁊ d̄ ℥ ī 12 erit d̄ minoꝭ moēta
ut 6/7 ⁊ d̄ minoꝭ unc̄ 1/7 ⁊ Cuiuſq; si d̄ minoꝭ moñ. hūūl. l. 10 mitt̄ eaſ℔
℥ q̄ſ ſup̄ ⁊ duūd℥ q̄ſ ſi℥ ℥ erit. lib̄ 1/2 ⁊ d̄ maioꝭ moñ. ut si d̄ maioꝭ
hūūl. l. 10 mitt̄ eaſ℔ ℥ poīas ſi℥ ℥ duūd℔ ℥ poīas ſi℥ ⁊ erit d̄ minoꝭ mo-
neta l. 1/2 12 Et si in ⁊ simili ⁊ solamine fiat q̄ ūcias ſuas reducat ad
integr̄ ⁊ ei ipſi integral. h̄ eodē ordine operat. Vt si h̄ moñ. ad 1/2 ℥ ⁊ ad
1/℥ 6 d̄ q̄bz unc̄ faciē moñ. ad 1/8 ⁊ mitt̄ h oīa ℔ 8 ut integrēt ⁊ h̄eb moñ.
ad ℥ 6 ⁊ ad 40 d̄ q̄bz unc̄ faciē moñ. ad ℥ 1 Deſcripta q̄dē q̄ē ut ānt̄ exeuabe
℥ 6 d̄ ℥ 1 remanēt 4 q̄ pē ſi℥ 40 q: tot. l. ponēde ſt̄ d̄ maioꝭ moñ. Eodēq;
o℔ diffiām q̄ē ad ℥ 1 usq; ī 40 pē ſi℥ ℥ ſ. ⁊ q: tot. l. mutēd℔ ℥ d̄ minoꝭ q̄bz
ubaſ ⁊ arcuſ ei℥ l. 4 mutatis rectis l. ℥ ℔ ſiīma totī ⁊ ſolaīs. Cuiuſta
ꝓbatio ē ut mutēs ⁊ ℔ ℥ 4 ⁊ ℔ ℥ 6 ⁊ h̄eb pargēto qđ ē mult̄s. l. ⁊ unc̄ ℥ 40
q̄ ꝑ eo qđ ē mlt̄ℓ 4 maioꝭ moñ. h̄eb unc̄. 1/℥ ℥ 1 q̄bz ūcias mutim adcius
rectū unc̄ ℥/℥ 71 ℔ pargēto qđ ē in ill̄ libras ℥ q̄ſ si dunq̄ ℥/℥ 71 ℔ ℥ ei
bē unc̄ 1/8 4 ut oportet. Et si ⁊ ſolaīs ut faciē libras 10 tōt mitt̄ 10 ℔ ⁊
71 ℔ 4 ⁊ duūdes q̄ſ mitt̄ tres ℔ ℥ ⁊ h̄eb d̄ minoꝭ moñ. libras ℥/7 6 ⁊ d̄ma
ioꝭ. l. 5/7 ℥ Et si bus d̄ minoꝭ moñ. l. 10 mitt̄ eaſ℔ 4 ⁊ duūd℔ ⁊ erit d̄
maioꝭ. l. 5/5 4 Vt si bus d̄ maioꝭ. l. 10 mitt̄ eaſ℔ ⁊ duūd℔ 4 q: ē sic 4
ad ⁊ ita 10 ad q̄situm. erit̄. l. 18 ut in q̄one ostēdit. Et hic em̄ regla per-
dit q. dā decimāti nalđ ⁊ sepe utile mēctanis in hūc modū. Mēcta em̄ ꝙ
faciūt q̄nq; erat eis aliq̄ntuli larga q̄nq; aliq̄ntuli scarsa. deest q. q̄nq;
ſi būdant in ꝑa aliq̄ntuli argēti. q̄nq; d̄fiat. q̄ accidit. ut ꝑ ignorāti
ſolidādi. ut ꝙ ꝑ mma. ut pauca ens ebulitē. Vñ aīi quā aigniēt. bō si
gniēt. oportet ut date q̄ntitati unī. addat̄ tōt exalia. ut reducāt ad debitū
modū. ⁊ exh̄ talem ꝓmmi q̄nem. De equperandi scharsa mēcta aī liga
Vidi bī libras 10 moñ. in cui aliq̄ q̄ntitate ut duceni ī unc̄. 1 d̄fiat argēti
q̄nl 1/2 1 ⁊ alī bī moñ. i cui unc̄. ſi hubūdāt argēti q̄na 1/℥ 2 q̄nt̄ q̄ntū ex
huc larga ei illi ſ lib̄ 10 d̄ scarsa q̄nt̄ sceu oporteat. ut reducāt ad debitū
modū. ℔ 1/2 1 ſi 1/℥ 2 mma lmea. ⁊ ſi latitudē. sīc scarsitatē. ⁊ equſo.
qđ scarsa ē minor mēcta q̄ ponit̄ ī ꝙsolamine. ⁊ larga ē maioꝭ. Vñ scarsus

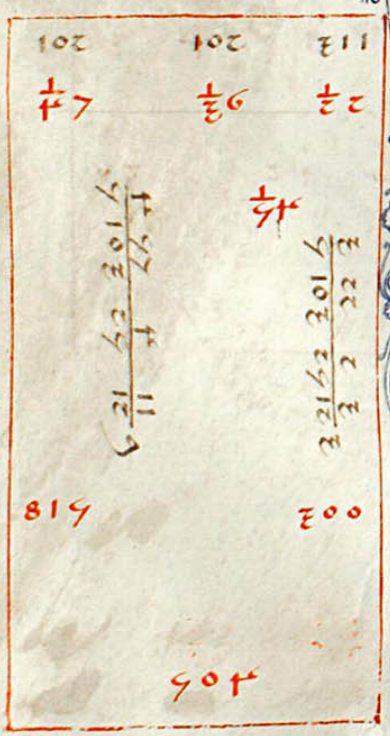




6 p.c

s. ½ 2 ē diffīa q̄ ē am̄nor moñ. usq; īmoñ. q̄a uult facē. q̄ diffīa ponēda ē
ut supl ostēd im̄ sī maiorē moñ. 7 largitas. s. ½ 2 ē diffīa. q̄ ē am̄nor usq
īmoñ. quā uult facē. q̄ diffīa ponēda ē sī minorē mōetū. Et tē erit sic ½ 1 ad
½ 2 ita quā uoluīt q̄ntitatē largitatis moñ. ad q̄ntitatē seuerit. 7 eqt. Cū
pōs lībras 2 sub ½ 2 .s. seuēritatē. sub seuēritate. ut h̄ ostēdit. 7 mīa 2 p ½ 1
7 duodecīp ½ 2 eqbit. l. 2 7 tñ 9 misceat d̄ largitate. ut illud lubz seuēre. Dicat ꝑdicte
libre 2 ee d̄ largitate. pōs ipas sub ½ 1 .s. largitatē. sub largitate. 7 mīa 2
p ½ 2 7 duodecīp ½ 1 eqbit d̄ seuēritate libre 1 4 Dē solutione trium mōetarū īt se
Dati tres moñ. ꝓponāt. q̄q; due sint minores 7 altū maior. ut due sint maiores
7 altū minor d̄ moñ fiendā. sic ex pīs duabz moñ. unā 7 sic bēb duas moñ.
ad solandū. q̄q; una erit maior. 7 altū minor. d̄ moñ. fiendā. Dā d̄ duabz mōetis
sit una tbz modis. s. 9 misceō eas. eīsue ut mēīue. seu ꝓportionabē. sm alīq;
datū ꝓportionē. q̄ oīa q̄ue fiat indicabim̄ inf̄ solatē. in q̄ ponit q̄ duabz
moñ. adunē 2 alīa ad 1 alīa ad 6 eqbz uult facē moñ. ad 4 deīde imaz
tres ꝑdictas moñ. i una linea. d̄ñi ut eqduabz minoribz fiat am̄ una moñ.
adde 2 ai 1 ei 7 7 tot unē argēti sī in libris 2 ꝑdicte 9 in exitoīs. Cū duo 7
p 2 habeb unē. ½ 2 p argēto q̄ ē i libra illi 9 in exitoīs. Cū duos habeo ad ½ 2
7 ad 6 7 uolo facē moñ. ad 4 Vt integrus duas habeo moñ ad 7 7 ad 12 eqbz
uolo facē moñ ad 10 Cū diffīam q̄ ē ad 7 in 10. s. 2 mittes d̄ maiori moñ. 7
diffīam q̄ ē ad 10 i 12. s. 2 mittes d̄ minoribz q̄ 2 duude i duo eī ai equalit̄ cū
illis eas ad faciendū eqes unā moñ. eqbit. l. 1 sī unā quāq; ipāz moñaz.
7 sic ei in summa libre 4 9 solatē ex pīs tbz mōetis mālz ℈ unē 2 4 argēti ut
oportet. Et si ex pīs duabz mōetis una facē uis 9 misceō eas i eīsue. ut ℈
aliquā datā ꝓportionē ut dicam. s. sic 2 ad 4 in d 9 mittē d moñ. q̄ ē ad 2 sic
ad illud qd mittē d moñ. q̄ ē ad 1 Cōmisceat unaq; 2 d moñ. q̄ ē ad ½ 2 7 tūcaq;
argēti q̄ sī i pīs. s. 2 duodecīp sunt ipāz libraz. s. p 7 eqbē unē. ½ 2 7 tot
argēti erit in. l. illi 9 in exitoīs. Cū duos habeo moñ ad ½ 2 7 ad 6 7 uolo facē
moñ ad 4 Ibē habeo moñ ad 2 6 7 ad 1 2 7 uolo facē moñ ad 2 4 ꝑdicte imaz
3 sī 6. s. diffīam q̄ ē ad 2 6 in 2 4 7 diffīam q̄ ē ad 2 4 in 1 2. 7 duode
mīalias duas moñ. sm ꝓportionē libraz 9 imparitatē pīs. 7 mittes pātes
4 d moñ q̄ ē ad 1 7 partes 2 mittes d moñ. q̄ ē ad 2 Ibē ½ eqlitas. 7 sī.
4 mittes d moñ q̄ ē ad 1 7 ½ eqlitas. s. l. 2 mittes d moñ. q̄ ē ad 2 Cū pōs
4 sī 1 7 2 sī 2 iacē. 7 ex m̄ sūma huī ꝓsolatis. l. 16 ex pīs tbz mōetis. mālz
sūt unē argētis eqbz 9 tēgūt immediatē i unē 4 ut oportuit. Et si ex b ꝓso
latē. l. 20 facē uoluīs reducēs hāc q̄onē ad modū secandū inq̄ pīm misit
2 sōs 4 ētī 3 7 lucra sī. l. 20 ex lanb g̃ 20 p 2 7 20 p 4 7 duodecīs una q̄ q̄p
misceō p 1 6 7 sic inuenies te mittē debē d moñ. q̄ ē libīs ½ 2 7 libīs ½ 6 d
moñ q̄ ē ad 1 Reliqui qd ē usq; in 2 4. s. libīs ½ 11 mittes d moñ. q̄ ē ad 6 q̄ eīa
habeb similiaris 20 p 3 7 duodecīs 16 Et sī libīs. l. 10 d moñ q̄ ē ad 2 7 ingsatis





[illegible] 4 [illegible] summa consolationis [illegible] 6 [illegible] dimidium [illegible] 12 [illegible]
[illegible] 9 [illegible] 10 [illegible] 16 [illegible] 6 [illegible]
[illegible] 4 [illegible] 12 [illegible]
[illegible] 9 [illegible] 16 [illegible]

De quatuor monetis per modum consolationis

Item habeo monetas ad unum 2 et ad 4 et ad 6 et ad 7 ex quibus volo facere monetas ad 4 secundum quod [illegible] modum fac de duabus minoribus monetam unam et de duabus minoribus aliam [illegible] equaliter vel proportionaliter [illegible]
Et si per modum consolationum facere vis fac ex una de minoribus et ex alia de maioribus unam consolationem et de reliquis duabus fac aliam. Faciamus ergo de ea que est ad 2 et de ea que est ad 7 unam consolationem et erit in summa ipsius 4 [illegible] de ea que est ad 2 et 2 [illegible] ad 7 [illegible] de reliquis fac consolationem aliam et erit in summa ipsius 4 [illegible] 2 [illegible] ad 4 et una ex ea que est ad 6 [illegible] 8 [illegible] aliam reducere ut dicamus in 19 [illegible] 19 [illegible] 8 [illegible] de monetis que est ad 2 [illegible] 7 [illegible] de ea que est ad 6 [illegible] 2 [illegible] de ea que est ad 7 [illegible] 4 [illegible] primam consolationem [illegible] de monetis que est ad 2 [illegible] 6 et de ea que est ad 7 [illegible] 4 et de ea que est ad 4 [illegible] 6 et de ea que est ad 6 [illegible] 4 [illegible] consolare [illegible] 19 [illegible] 12 consolare vis sine aliqua fractione [illegible] consolationes [illegible] de monetis que est ad 2 et de ea que est ad 6 fac [illegible] consolationem [illegible] 2 [illegible] 1 de qualibus ipsarum et de reliquis duabus fac quartam [illegible] 4 [illegible] 4 [illegible] ad 4 [illegible] 1 ex ea que est ad 7 [illegible] 12 [illegible] primam consolationem [illegible] et sic erit de monetis que est ad 2 [illegible] 4 [illegible] 6 [illegible] 1 [illegible] ad 7 [illegible] 12 [illegible] consolationem [illegible] 16 [illegible] 4 [illegible] 2 [illegible] de una quaque reliquarum [illegible] modum [illegible] integraliter consolare.

De quatuor monetis quando minores tres sunt et altera maior

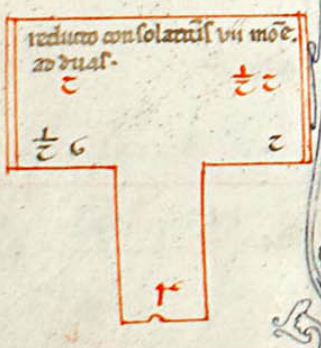
Et si ex quatuor monetis tres [illegible] ab una parte consolationis [illegible] tres de monetis fienda [illegible] monetas ad unum 4 et ad 4 [illegible] 7 [illegible] volo facere monetas ad 6 si per modum consolationum procedere vis [illegible] monetarum [illegible] maiorem [illegible] ea que est ad 7 unam consolationem [illegible] 4 [illegible] 1 ex ea que est ad 4 [illegible] 4 [illegible] 7 [illegible] 4 [illegible] 1 ex ea que est ad 4 [illegible] 2 ex ea que est ad 7 [illegible] 2 [illegible] 1 ex ea que est ad 4 [illegible] 1 ex ea que est ad 7 [illegible] 9 [illegible] summa totius consolationis [illegible] 6 [illegible] 7 [illegible] 1 [illegible] in equaliter mittere vis [illegible] in summa [illegible] consolationis [illegible] 1 [illegible] 4 [illegible] 4 [illegible] 4 [illegible] 10 ex ea que est ad 7 [illegible] 4 [illegible] ex ea que est ad 4 [illegible] 4 [illegible]

prima	2			4
	7			2
		4		
secunda	1			2
	6			4
tertia	1			1
	2			2
	6			2
		4		
quarta	1			4
	7			4
		4		

		1	1	1
7		4	4	4
	6			
prima	4			1
	7			4
		6		
secunda	2			1
	7			4
		6		
tertia	1			1
	7			4
		6		

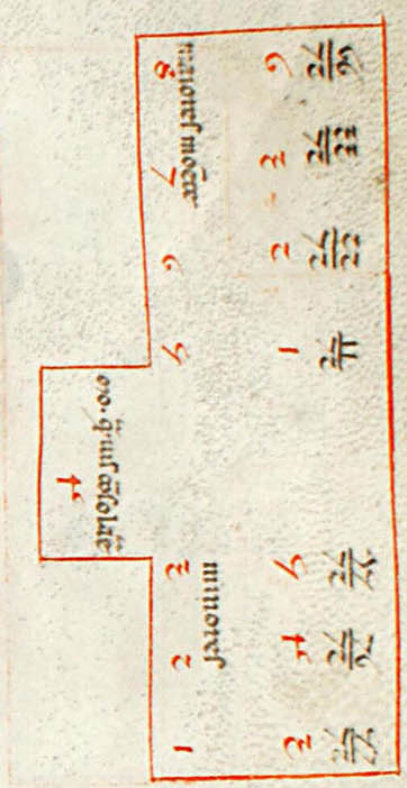
de monetis fienda

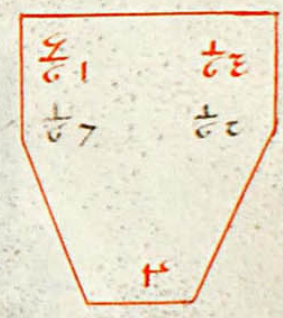
[illegible]



ſũma totiꝰ ꝙsolaõis .l. z ꝓ ꝑmã ꝙsolatõm ſcmꝫ ꝙ ſum. b. ꝙ ttiã q̃ꝫ. ꝙ habeb ꝓ
nõm ꝛi q̃ſite ĩ aũ ꝓ ꝓtuoꝰ ſũma ſt̃. l. is exq̃bz .l. ıı ſt̃ exceꝫ q̃ ad z ꝙ .l. r exceꝫ q̃
ad 4 ꝙ .l. z exceꝫ q̃ ad r m. l. ı exceꝫ q̃ ad z ꝙ ſũr. l. ꝑdicte cũ mnoꝝ mõetaꝝ
m ꝓportõ ꝙtuia. q. ſic r ſt̃ ad z tta z ad ı ut ſic ı ad z tta z ad r Q̃ mlcaõ
d ı m r eiꝫ mlcaõ d z ĩſe. vñ ut ſũma b ꝙ ſolaũ ſ redigat̃ m. l z ꝙ in hac ead
ꝓportõ mlca z admodũ ſocietatiꝫ ꝑ ı ꝙ z ꝙ r ꝙ ıı ꝙ una quã q̃ mlcaõꝝ
duud ꝑ ıs exhr̃ d̃moꝝ q̃ ad z .l. 1/2 ı d ea q̃ ad r .l. 1/2 z ꝙ d ea q̃ ad 4 .l. 2/3 r
ꝙ d ea q̃ ad 7 .l. 2/3 ız De conſolamine ſeptẽ mõetaꝝ.

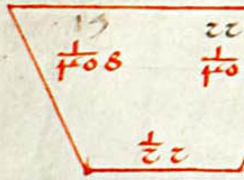
Eſi ma aliꝰ ꝙsolaõ ponat̃ ſeptẽ mõte q̃ꝫ tres ſit mnores. ꝙ q̃ttuor maiores
d̃moꝝ fiend̃ ut moꝝ ad ı ꝙ ad z ꝙ ad z ꝙ moꝝ ad 4 ꝙ ad 6 ꝙ ad 7 ꝙ ad 8 quiꝫ
capit̃ fiãt moꝝ ad r ꝙ aliꝰ ꝑmodũ ꝙsolatiõũ ꝓcedẽ fiaꝫ exceꝫ q̃ttuor
ꝙsolatiõs. Cũ mõete q̃ plẽs ſt̃ ab una pte ſit q̃ttuor. tres eñ exẽpꝫ ꝙsola
tiombz fiaꝫ ad libitũ exẽbz maiorbz ꝙ exẽbz mnorbz. quãtũ uo faceꝫ ꝙ
maiꝰ moꝝ. ſi habũdãte eĩ una d̃mnorbz q̃lẽ uoluñ ꝙ ſũmal q̃ttuor ꝙ
ſolatiõũ mnũ redige. ꝙ habeb ſũma totiꝰ ꝙsolaõis. d̃nī poteſt ꝓcedẽ ſm
q̃dictũ ẽ ſupꝰ in hiſ q̃ꝫ ꝑ m poſſũt in ꝙsolaõe mõetaꝝ. Sz ut mod ꝑmꝰ medꝰ
mlligat̃. qualit̃ ſm ipm opus debeaſ indicabo. Ad̃ q̃d̃. l. ı exuma q̃ꝫ m
noꝝ mõetaꝝ. ꝙ m ſce eaſ in ſimꝫ eĩ. l. z d̃q̃bz fiat mõeta una. ſ. duud ny
eaſ argũ q̃ ſt̃ in ꝑis ꝑ z uelmet moꝝ ad unũ z ſua ea ꝙ fiat exq̃ttuor moꝝ
maiombz mõeta. alia ꝙ m ſcõdo eaſ eccl̃ ſicut ſcm ꝛi mnores exhr̃ moꝝ
ad unũ 1/2 6 q̃ puenũt ex ſũma d ꝙ 4 6 ꝙ 7 ꝙ 8 dunſa ꝑ r. ſ. ꝑ unũ mlcaõ
duaꝝ maiorꝫ mõetaꝝ. Ergo ducaſ habeo mõeta ad z ꝙ ad 1/2 6 ꝙ uolo facere
moꝝ ad r ꝙ habeo mõeta ad r ꝙ ad ız ꝙ uolo facẽ ad 8 Extrahe q̃d r d 8 re
manẽt r ꝙ tot mutes d̃maiorbz mõetaꝝ. extrahe 8 d ız remanẽt 4 ꝙ tot
mutes d̃mnorbz. ſ. tria ꝑtẽ eaꝫ duna q̃ꝫ. Sz q. 4 ñ duudũ integraliꝫ
ꝑ z mutaſ. l. 4 exuma q̃ꝫ mnoꝝ mõetaꝝ. ſ. ꝓplũ tue ꝑtiꝫ d 4 ꝙ ꝓplab r
q̃ debebãt mutꝰ ex maiombz eĩ ız q̃ꝫ quãtũ ꝑtẽ. ſ. z mutes d una quaq
maiꝰ mõetaꝝ ut m q̃ oſtẽdit. ꝙ eĩ ĩ ſũma dicti ꝙsolaõis .l. z d uiocẽs
exceaſ lib aliq̃ualiſ moꝝ. ꝙsolare uoluñ. faceꝫ ut ſupꝰ ĩ ceũ ſm regulã quia
in ſocietate oſtẽdim̃. Alr cum poãt q̃ ꝑ ĩeq̃lr ꝓportionale d mõeta
Tam ſi ſdictaꝝ mõetaꝝ ꝙsolaõ aliꝫ facẽ uoluñ ut d nulla ipaꝝ aliq̃ pona
t̃ eq̃ualiſ ſic faceꝫ. ſcde q̃em ut h oſtẽdit. Posth ſcde ſup una quãq mãũ
nuõꝝ adlibitũ qualeſ uoluñ inequales. tñ tales nuõꝝ ſup̃ mnores moꝝ ad
ſcdaſ. ut cũ in ſimꝫ iunctꝰ fuĩnt. redlãt aliq̃e ſanũ ꝙ poteñ nuõ. ut pos
ſo q̃d̃ pars in debñ ſeũ duudaſ. Pcẽ g ſi eaſ ız inꝰ ĩeq̃les ptes dunſaꝫ
ut pote in z 4 ꝙ 4 ut ſupꝰ in q̃ꝫ poĩta ẽnꝰ. q. duodenariꝰ nuñ ız in mõetaꝝ
ꝙsolaõ neceſſariꝰ atq; integer repit̃ ꝑ libꝝ q̃ ẽ unũ ız vñ ad aliꝰ libraꝫ
nuñ in ız duudã q̃ſi ız remanſit eĩ unũ. Illud uo tñ q. d̃mnorbz maiꝰ
occurrit. fac d̃maiorbz. Pcẽs ꝙ ſi ꝑ ꝓpoſitũ. nuñ. maiores mõetaꝫ ız in q̃ttuo





ioſtel pārel duula. ſ. ī 1/12 7 7/12 7 6 ut ſīr ea ī qcē poīta ſ. Poſt̄ mſca nūm ſīr minozē moñ. poītū. p ipām minozē mcētū. ſ. 7/12 p 1 er̄ 7 q̄ ſua. Jtē mſca ſeq̄ē poītū nūm pleq̄ntē moñ. ſ. 4 p 7 er̄ 8 q̄ ſua. Jtē mſca ētū poītū nūm ex pārū minozē moñ. ſ. 4 p 7 er̄ 14 q̄ adde ai 8 7 ai 7 ſupl̄ ſuant ſ er̄ unē aīgū 7 6 Jdē itaq; tres ſīr poītoz nuōz udeliez 7 4 7 4 er̄ 12 m̄qbz duūd 7 6 exbīt ūd. 1/6 7 q̄l habeb̄ abuna pāte ꝯ ſolaīs. Jtē poītū nūm ſīr minozē nūm maiozū mcētaū. mſca p ipām mcētū. ſ. 1 p 4 er̄ 4 q̄ ſua. Jtē mſca ſeq̄ntē poītum nūm pleq̄ntē mcētū. ſ. 12 p 6 er̄ 12 q̄ ſua. Jtē mſca 7 p 7 er̄ 21 q̄ ſua. Jtem mſca poſtioze poītū nūm. ſ. 6 p poſtioze maioze mcētū. ſ. p 8 er̄ 48 q̄ adde ai 4 7 ai 12 7 ai 21 er̄ 86 q̄ duūd p unctiōm ſīr poītoz nuōz 4 q̄ ſ ſīr maiozē mcētū ſ. ſ. p 12 exbīt unē 1/6 7 q̄s b̄eb̄ abalia pte ꝯ ſolaīs. Poſt̄ redige dic tarū oīū 7 mcētaz ꝯ ſolarū. Ad ꝯ ſolarū duaz mcētaz. udeliez ut ſi diag lubeo mcētū ad unē 1/6 7 7 mcētū ad unceal 1/6 7 uolo nī fiē moñ ad unē 4 amnozū itaq; mcētū uſq; in mcētū qūa unſ fiē. ſ. a 1/6 7 uſq; in 4 d ſuīt 7/6 1 7 tm mittāſ d maioīb; mcētū inequalit̄. ſcdm ꝓportiōm nuōrū poītoz ſīr ipāl. ſ. d mcēta q̄ē ad 4 mittez una pāte exipīs 7/6 1 Et de ea q̄e ad 6 mittez duaſ partez. 7 d ea q̄ ett ad 7 mittez trez partez. 7 d ea q̄ē ad 8 mittel ſex partez. ḡ addel ad modū ſcietatū 1 7 7 7 7 6 er̄ 12 Et mſcab 7/6 1 p 1 7 duūdez p 12 exbīt 11/12 q̄l pē ſīr ipām mcētā q̄ē ad unē 4 q; mſ portio d ipā moñ eīt ponēda in ꝯ ſolaīe. Silr mſcab ſin gl̄aīt 7 7 7 6 p 7/6 1 7 duūdel ſingl̄aīt̄ p 12 exbīt 77/12 7 57/12 7 66/12 quaz pē ponūt̄ ſīr reliq̄l trez mcētaſ ut ſupl̄ inq̄t oſtēdit̄. Rurſū accipe diffīā q̄ē a 4 uſq; in 1/6 7 q̄ē 1/6 7 7 hāt ea ꝓportiōm q̄ ponēda ett d utrīq; minozīb; mcētaſ in p̄ſcīpto ꝯ ſolaīe 7 duūdez ipā 1/6 7 in .xii. partez dar do trez pārez minozi monetę. 7 nūi. partez alie. 7 v. partez ctie. 7 ut h̄ fiat aſ mſca 7 q̄ poīta ſt̄ ſīr minozē monetā p 1/6 7 7 duūd p 12 exbīt 77/12 q̄s pē ſīr minozē moñ. q; mſ portio eīt ponēda in ꝯ ſolaīe d ipā minozi moneta. Silr mſca 4 q̄ poīta ſt̄ ſīr mcētū q̄ē ad unē 7 p 1/6 7 7 duūd p 12 exbīt 76/12 q̄l pē ſīr ipām moñ. Jtē mſca 4 q̄ poīta ſ ſup moñ q̄ē ad 7 p 1/6 7 exbīt 27/12 qual pē ſīr ipāz moñ. ut in q̄ē oſtēdit̄ ſupl̄.

Et nota q; ido fecim ſeptuagelimaſ ſuſ. d. vii. portiōīb; q̄ ponēde ſ exp̄dias 7 mcētaſ ut eā ipē portiēs ſūt ex eiſd nuptaſ. ſ. ex ſeptuagelimaſ ſoliſ poſ ſuīt eē integre libre ī eaſdē nūſ. b̄ē q̄d d minozi moñ. mittez lib̄aſ 47 ai d ea mittē delea m 77/12 7 ead mittē d moñ q̄ē ad unē 7 mittez lib̄as 76 7 d ea q̄ē ad unē 7 mittez lib̄aſ 94 7 d moñ q̄ē ad unē 4 mittez lib̄aſ 11 7 d ea q̄ē ad unē 6 mittez lib̄as 22 7 d ea q̄ē ad unē. 7 mittez. ſ. 22 7 de maiozi moñ mittaſ lib̄aſ 66 7 ſic b̄eb̄ ꝓpoītū. ſlā ſi d p̄noīato ꝯ ſolaīe tñ lib̄aſ 10 ꝯ ſolarē uoluīſ. adde p̄ſcīptaſ lib̄aſ q̄l d p̄ſcīptaſ mcētaſ mittē delea. ſ. 47 7 76 7 94 7 11 7 22 7 7 7 66 er̄ libre 7 60 in quibz duūd mſca



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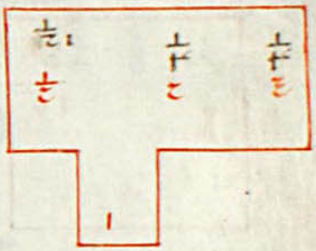
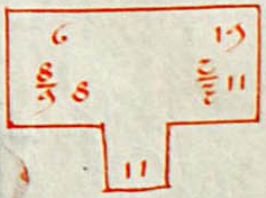
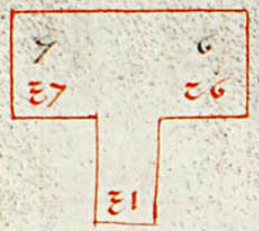


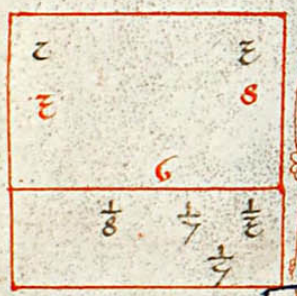


6 ꝙ ade 6 ai 19 ei' 24 ꝙ mlau 10 p 19 ꝙ duud p' 4 exbt dcm 24/4 ꝙ tot mne
stunt in pmis. D' laboratore laborante inquodam opere



Vidã emit ceptu' i mse ausa sun laboris bz 7 si alq tpe a labore cessatz
emit reuocat' ad rdem mlis bz 4' stetit pmse ecq; qnq; labouauit q; n.
sic q' habit d eo q; laborauit bz 1 diso putauit eo q; n laborauit. Quer q; qnq
laborauit ꝙ qntũ n excpo mse. sic facies. Adde dies mlis q 30 ai bz 7 q; lucra
lat ei' 24 ꝙ ipis 30 tolle 4' q; emit recipit' si n laborasset remanet 26 Jte
ai 30 a de lucrũ qd fec'. s. 1 ei' 21 ꝙ dicat habeo moñ ad 26 ꝙ ad 24 ꝙ uolo
face' eccal labr' 30 .s. pdictj mlis q; fr' 30 ad 21 q; faciendũ e p supdictã decimã
modũ ut dr dissimilã q; e a 24 usq; m 21 .s. 6 pes fr' 26 ꝙ dissimilis q; e a 26 usq;
m 21 .s. 4 pal fr' 24 q; euidẽt apparet q; q; pes illi mlis laborauit. ꝙ sex
pertes a labore cessauit. Vñ diuidendi sunt dies mlis .s. 30 in bis partibz sm modũ
sex etatis. Et sunt a de s 4 ai 6 ei' 11 inq; bz diuides mlocem d 4 i 30 exbit dies
7/11 12 ꝙ tot [illegible] laborauit. Et de. sibi mlcab 6 p 30 ꝙ diuides p 11 exbit dies 5/11 16
inquibz n laborauit memoratus hõ.

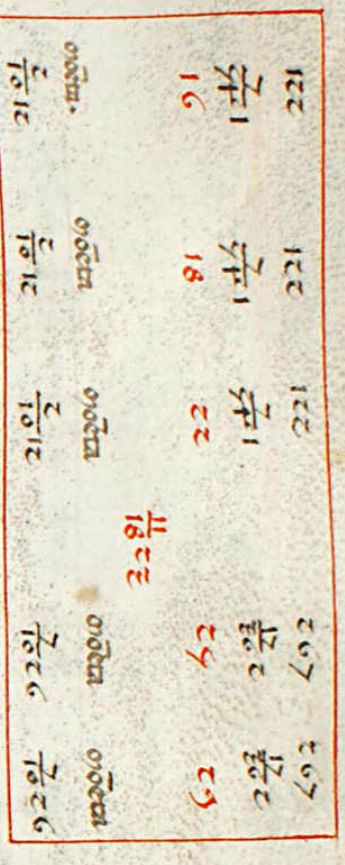
Iunio 30 i diuid partes ꝙ accepi 1/2 unã ꝙ 1/8 alterã. ꝙ adde fr' 30 ꝙ d ꝙ aretq; summa
exterã q; ma. ꝙ minuse' 30 q; d q; aliq; summa exterarũ 1/4 ei remanet 5/4 et de. q; 5/4
q; arte summe fr' 30 ꝙ q; 1/4 ar tertiq; summe. Et quarta d 5/4 et de. q; 1/4 ꝙ arte summe et
d 5/4 q; 1/4 fiunt 1/2 [illegible]me partes ꝙ 1/8 sc. Et unaq; istarũ pot 30 et diuisa i 30 q; q; q;
si accepi 1/2 pmo pertis ꝙ 1/8 sc uenit unaq; 1/4 d 30 eodem modo. Rursus si accepis
1/2 secundas. Et q; ꝙ 1/8 pmo uenit 1/3 d 30 .s. si ai accepis 1/2 unã exterarũ duabz
partibz. ꝙ 1/8 alterã quarum 1/4 d 30 q; habeo moñ ad 1/2 d 30 ꝙ ad 1/3 d 30 ꝙ uolo face'
moñ ad 1/4 d 30 q; ai sũt pres unã. ꝙ ei' nũ. s. d 30 i differẽtiã possiũ ducere
habeo moñ ad 1/2 ꝙ ad 1/3 ꝙ uolo face' moñ ad 1/4 Et habeo moñ ad 8 ꝙ ad 2 et
uolo face'. l. 30 ad 6 permutatis differẽtiis inuenies pmã partẽ ee 5/4 d 30 .s. 24 de
5/4 .s. 8 Et si ponat' remanẽ 19 ai d q; summa exterarũ 1/4 adde fr' 19 q; ma
cor ei' 5/4 24 q; summa q; arta d q; exterarũ 30 remanet 5/4 24 q; d nota a 30 .s.
diuide ea p 30 exbit 24/30 ꝙ sic hẽs moñ ad 1/2 ꝙ ad 1/8 ꝙ uis face'. l. 30 ad 24/30 Et ha
beo moñ ad 16 ꝙ ad 6 ꝙ uolo face'. l. 30 ad 4 permutatis q; differẽtiis inuenies
pmã partẽ ee 7/30 d 30 .s. 6 sunt 7/30 .s. 1 4'

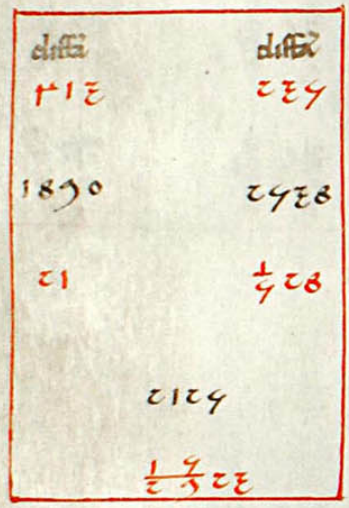


Item diuisi 30 mtes partes. ꝙ fr' ei adde 1/2 pme partis. ꝙ 1/4 sc. ꝙ 1/8 tcie. ꝙ de
arta summa exterarũ secundi ei. ꝙ remanse' 30 supdicat' mtes d montium nõiz inuenies
q; 1/6 q; arte summe et 1/4 de 5/6 ei de. s. d 30 q; habeo moñ ad 1/2 ꝙ ad 1/4 ꝙ ad 1/8 ꝙ uis face'
moñ ad 1/4 posita qd potis p pdictã decimã inuenire pceptis partes ꝙ eas secũdas
partes ai tcias inquacũq; uoluis pportõe. D' hoie q; emit modia 90 q; q; bladi
Vidã emit ostiãmopoli modia 90 mẽ frumenti ꝙ miliũ. ꝙ fabas ꝙ ordeũ. ꝙ le
guminis ꝙ bz 21/24 Et mudelicz rõe. q; modia cereũ frumenti uidelicet ꝙ bz 29 ordei
lo ꝙ bz 24 orilu ait ꝙ bz 22 fabaꝝ nãq; bz 18 Et lẽticulaꝝ bz 16 Quer
q; [illegible] d una q; bladi. sic facies. Vid q; ualeãt modia 100 mixtarũ

bladuꝝ cū modus ꝯ excl ualeāt briꝫ $\frac{1}{4}$ t 1 Verb̄ sacaſ. mtáa media 100 pbriꝫ $\frac{1}{4}$ t 1
ꝙ duud p ꝯ exabt briꝫ $\frac{11}{18}$ t 2 p p̄mo cētū modiorū. Vñ ut redigat̄ hāſtuo admo
netuꝝ ꝙ ſolam̄ dicēdū ē. bulbo moñ. adunc̄ t ꝯ ꝙ ad t 4 ꝙ ad tt ꝙ ad 18 ꝙ ad
16 ꝙ exc̄ uolo facē mon̄. ad unc̄. $\frac{11}{18}$ t 2 ꝙ ſolare exc̄ 4. l. ꝯ qr̄ dſcde qēcy
mbuc̄ modū. ꝙ adde mſimł p̄mū d̄ antiozibꝫ bladuſ. ſ. briꝫ t ꝯ aī briꝫ t 4 ēt 4 t
ꝙ qz duaꝝ bladaꝝ mſimł uncialiū duud 4 t p t exabt t 7 d̄ qbꝫ exc̄be briꝫ $\frac{11}{18}$ t 2
remanēt briꝫ $\frac{7}{18}$ t q muꝫ ē ꝓpositio tū uulū bladaꝝ. qr̄ duudeꝫ $\frac{7}{18}$ t p rſpꝫ tres
bladuſ exabit $\frac{7}{4}$ t 1 q p̄c ſr̄ briꝫ tt. ꝙ ſr̄ 18 ꝙ ſr̄ 16 uc̄ dſcpt̄e o ſtēdūt. ꝙ adde
iſimł p̄mū aliaꝝ tū bladaꝝ. ſ. tt ꝙ 18 ꝙ 16 ēt 46 q duud p t exabt $\frac{7}{4}$ t 18
aqbꝫ uſqꝫ ī $\frac{11}{18}$ t 2 d̄ſuꝫ $\frac{17}{18}$ t 2 q ſuꝫ ꝓpositio earuꝫ bladaꝝ. qr̄ duud $\frac{17}{18}$ t p
t exabit $\frac{17}{4}$ t q p̄c ſr̄ t ꝯ ꝙ ſr̄ t 4 aqbꝫ ita dſcptꝫ redigūt̄ h̄ āſtuo ad locū tantum
qēcy. mdeliꝫ q̄ unꝰ mulc $\frac{17}{4}$ t 7 alt̄ totidē. ꝙ tū $\frac{7}{4}$ t 1 ꝙ quāt. ꝙ q̄nꝰ totidē.
ꝙ lucū ꝫ media ꝯ Vñ oportet ut ſacaſ d̄ uno q̄qꝫ nuō cētelimaſ octauaꝫ q
108 repūt̄ p̄ducti rurſꝰ ꝙ dſcde unū quicq ip̄oꝝ ſr̄ ſui nūm. ꝙ ſic habeb
t 67 ſr̄ t ꝯ ꝙ ſr̄ t 4 et 1 tt ſr̄ tt ꝙ ſr̄ 18 ꝙ ſr̄ 16 qbꝫ ī ſimł adcruſ. ſ. t 67 ꝙ
t 67 ꝙ 1 tt ꝙ 1 tt ꝙ 1 tt ēt ꝯ 100 inq̄ꝝ regla duud mſcatōm d̄ modiꝫ ꝯ
i unū quicq p̄ſcptoꝝ nuōꝝ. Vt qr ꝯ ſt $\frac{1}{10}$ d ꝯ 00 acē $\frac{1}{10}$ d ſuꝑ ſcptꝫ numiꝫ
exabit d̄ſumto media $\frac{7}{10}$ t 6 ꝓ briꝫ $\frac{7}{10}$ $\frac{4}{10}$ $\frac{7}{10}$ 7 d ordeo media $\frac{7}{10}$ t 6 ꝓ briꝫ
$\frac{7}{10}$ $\frac{7}{10}$ $\frac{6}{10}$ 6 ꝙ d milio media $\frac{7}{10}$ 1 t ꝓ briꝫ $\frac{7}{10}$ $\frac{8}{10}$ $\frac{6}{10}$ t 7 d fabiꝫ mod $\frac{7}{10}$ 1 t
ꝓ briꝫ $\frac{6}{10}$ $\frac{7}{10}$ $\frac{1}{10}$ t ꝙ d lenticul mod $\frac{7}{10}$ 1 t ꝓ briꝫ. $\frac{7}{10}$ $\frac{5}{10}$ $\frac{9}{10}$ 1 Alī de ep̄ac̄ bladaꝝ

Ceū ſi eq̄lē d una q̄qꝫ p̄ducaꝝ bladaꝝ ſe hūſle ꝓpoliūꝫ. alī quā ſupī ut
i eq̄lcate mēcaꝝ dicam̄ dicē uolum̄ ut ꝑplicaī ſiles q̄ꝫ ſoluē ualaꝫ. p̄c
ut emiſſi ecuna ip̄aꝝ q̄ntū uſ. Ilā ut magꝫ uenat expedītū. p̄c ut emiſſi
ecta q̄ualet briꝫ t ꝯ mod ꝙ ido qr ip̄a media ꝙ ualēt briꝫ $\frac{1}{4}$ t 1 q media ꝙ ec
tuabe d ꝯ remanēt mod 8 ꝙ $\frac{1}{4}$ t 1 extuabe d $\frac{1}{4}$ t 1 remanēt. briꝫ t o oꝫ re
ſtāt ꝙ ſolare nob media 8 ꝙ pbriꝫ t o ime reliqſ q̄ntuoꝝ bladaꝫ. Vñ adlibitū
p̄ꝫ ut ecta q̄ualēt briꝫ 16 emiſſi media t ꝯ q̄ualēt briꝫ t remanēt mod
60 ad ſolandū pbriꝫ 16 aī reliqſ ōz bladiꝫ. Jtē ſūmeꝫ adlibitū ut emiſ
ſi media 10 d ea q̄ualer ēctenariū briꝫ 18 q̄ media 10 ualēt briꝫ $\frac{5}{4}$ 1 uñ diꝫ
opuratuſ modiꝫ 10 d 60 ꝙ briꝫ $\frac{1}{4}$ t 1 d 16 remanēt mod 40 ad ſolād pbriꝫ $\frac{1}{4}$ t
ime ip̄ūm. aū centenariū ualeꝫ briꝫ tt ꝙ aī q̄ualer briꝫ t ꝯ qr̄ dicendū ē ſi
media 46 duaꝝ ꝙ mixtuꝝ bladaꝝ ualēt briꝫ $\frac{1}{4}$ t q̄ntū ualēt media 100
ꝙ cab ſiq̄dē 100 p $\frac{1}{4}$ t ꝙ duudeſ p 40 h̄ ē duplicab ea exabit briꝫ $\frac{7}{4}$ t 8 diꝫ
muꝫ bulbo moñ ad t ꝯ ꝙ ad tt ꝙ uolo ec ex facē ulbꝫ 40 moñ ad $\frac{7}{4}$ t 8
d̄ſcpto ſiq̄d p̄ſcpto ꝙ ſolaīe ut ſupī edocet. Hoc diffūm q ē a tt uſqꝫ ī $\frac{7}{4}$ t 8. ſ.
$\frac{7}{4}$ 6 ꝙ ſcde ea ſr̄ t ꝯ ꝙ a $\frac{7}{4}$ t 8 uſqꝫ ī t ꝯ d̄ſuꝫ $\frac{7}{4}$ q̄l p̄c ſr̄ tt ꝙ fiet ſcdetuꝫ d
$\frac{7}{4}$ 6 ꝙ d $\frac{7}{4}$ q facuīt ꝙ inquibꝫ duud mſcatōm d $\frac{7}{4}$ 6 ī 40 exabit media $\frac{7}{4}$ t 4
ꝙ tū emuꝫ d ulla d t ꝯ ꝙ tū duudeꝫ ī eaꝺ ꝙ mſcatōm d $\frac{7}{4}$ ī 40 exabit media
$\frac{7}{4}$ t ꝙ tū emuꝫ d ulla q̄ualēt briꝫ tt Alī de eisdem bladis


11
18
2 1 2
2 1 2
2 1 2



[illegible] 20 [illegible] $\frac{1}{2}$ [illegible]
[illegible] $\frac{100}{89\frac{1}{2}}$ [illegible] $\frac{451}{89\frac{1}{2}}$ [illegible]
[illegible] 18 [illegible] 5 [illegible]
[illegible] $\frac{1000}{289\frac{1}{2}}$ [illegible] 18
[illegible] $\frac{10}{29}$ [illegible] $\frac{100}{89\frac{1}{2}}$ [illegible]
[illegible] 5 [illegible] 18 [illegible] 10225 [illegible] $\frac{100}{89\frac{1}{2}}$
[illegible] $\frac{520}{89\frac{1}{2}}$ 11 [illegible] 18 [illegible]
16 [illegible] 5 [illegible] 90 [illegible] 2065 [illegible] 1 [illegible] 16 [illegible]
2065 [illegible] $\frac{100}{89\frac{1}{2}}$ [illegible] $\frac{162}{89\frac{1}{2}}$ 2 [illegible] 16 [illegible]
[illegible]

De Campana ex quinque metallis

Quidam volens facere campanam de quinque metallis ex quibus cantat unus valet libras 16 alterius vero libras 18 alterius nonaque libras 20 alterius vero libras 27 alterius libras sigillatim 31 [illegible] campanam que pondere rotulos 775 que constituit libras $\frac{3}{4}$ 162 [illegible] uno quoque metallo que omnia facere potest per predictam regulam bladarum [illegible] videamus cum rotuli 775 commixtorum metallorum valent libras $\frac{3}{4}$ 162 [illegible] rotuli 100 scilicet cantare. Quod sic videndum est ut multiplicetur $\frac{3}{4}$ 162 per 100 [illegible] 16275 [illegible] dividatur per regulam de 775 que est $\frac{100}{55\frac{1}{4}}$ exibit 21 [illegible] ad monetarum consolationem. habeo monetam ad 31 et ad 27 et ad 20 et ad 18 et ad 16 et volo [illegible] facere libras 775 monete ad libras 21 quod consolationem si olim de monetis similiter [illegible] inveniens [illegible] in prescripta campana [illegible] 16 rotulos $\frac{29}{3\frac{1}{11}}$ 187 pro libris 30 et dicitur $\frac{6}{11}$ 14 et [illegible] 18 rotulos $\frac{29}{3\frac{1}{11}}$ 187 pro libris 33 et [illegible] 16 et dicitur $\frac{4}{11}$ 4 et [illegible] 20 rotulos $\frac{29}{3\frac{1}{11}}$ 187 pro libris 37 et [illegible] 2 et dicitur $\frac{2}{11}$ 6 et [illegible] $\frac{17}{2\frac{1}{11}}$ 104 pro libris 28 et [illegible] 10 et dicitur $\frac{2}{11}$ 8 Et si inequaliter in prescripta campana de uno quoque metallo mittere volueris facies secundum quod in [illegible] modiorum 90 quinque bladarum superius demonstrabimus. Sed si in integris notum [illegible] omnia hic [illegible] [illegible] consolationum [illegible] metallo [illegible] 60 [illegible] 144 [illegible] 400 [illegible] 124 [illegible] 40 [illegible] consolationes cum diversis integris [illegible] primi metalli [illegible] 9 [illegible] 12 secundi [illegible] 27 tertii [illegible] 80 quarti [illegible] 33 [illegible] 14 [illegible] 8

De homine qui emit aves triginta trium generum pro dictis 30.

Quidam emit aves 30 pro dicitur 30 In quibus fuerunt perdices columbe et passeres. perdices vero emit dicitur 3 columba dicitur 2 et passeres 2 pro dicitur 1 scilicet passeres 1 pro dicitur $\frac{1}{2}$ Queritur quot aves emit de uno quoque genere. dividatur dicitur 30 per aves 30 exibit dicitur 1 Dic ergo habeo monetam ad $\frac{1}{2}$ et ad 2 et ad 3 et volo facere monetam ad 1. In similibus enim [illegible] est per modum consolationum [illegible] integros numeros annum. Quare ut [illegible] [illegible] habeo monetam ad $\frac{1}{2}$ et [illegible] $\frac{1}{2}$ et ad 2 et ad 3 et volo facere monetam ad 1 [illegible] habeo monetam ad 1 et ad 1 et ad 4 et ad 6 et volo facere monetam ad 2 [illegible] [illegible] consolationem [illegible] aves 5 pro dicitur 5 scilicet passeres 4 et perdices 1 [illegible] passeres [illegible] columbe [illegible] 3 [illegible] 3 scilicet passeres 2 et columba 1 [illegible] aves 30 consolatas. [illegible] consolationem [illegible] in quibus erunt passeres 12 et perdices 3 [illegible]

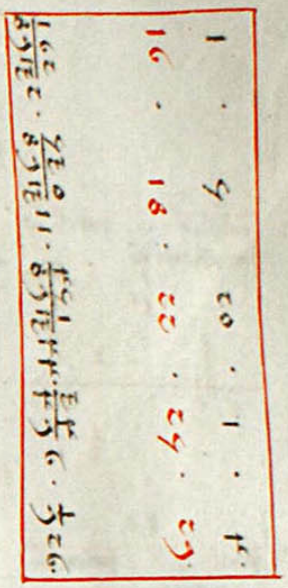
1	5	20	1	4
16	18	22	25	29

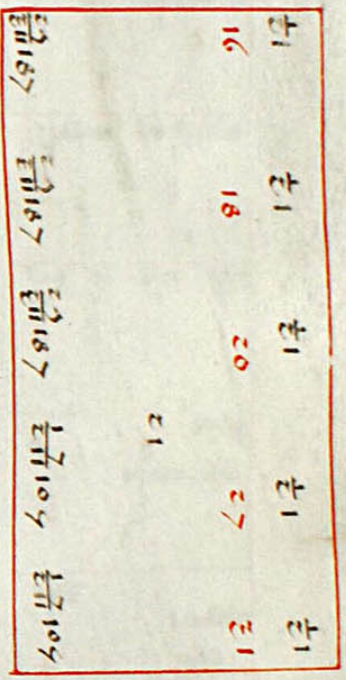
$\frac{162}{89\frac{1}{2}}$ 2 · $\frac{720}{89\frac{1}{2}}$ 11 · $\frac{451}{89\frac{1}{2}}$ 44 · $\frac{4}{5}$ 6 · $\frac{1}{3}$ 26

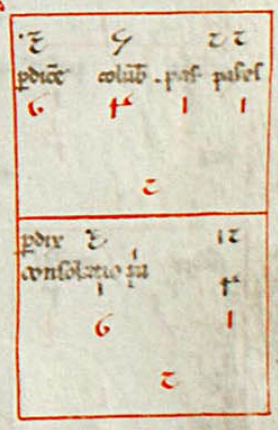
$\frac{1}{2}$ 1	$\frac{1}{2}$ 1	$\frac{1}{2}$ 1	$\frac{1}{2}$ 1	$\frac{1}{2}$ 1	$\frac{1}{2}$ 1	$\frac{1}{2}$ 1
16	18	20	27	31		
		21				
$\frac{29}{3\frac{1}{11}}$ 187	$\frac{29}{3\frac{1}{11}}$ 187	$\frac{29}{3\frac{1}{11}}$ 187	$\frac{17}{2\frac{1}{11}}$ 104	$\frac{17}{2\frac{1}{11}}$ 104		

et exodum 31 [illegible] $\frac{17}{2\frac{1}{11}}$ 104 pro 32 et [illegible] 14 et dicitur $\frac{8}{11}$ 2.

3	5	22	
perdices	columbe	pas	passes
6	4	1	1
	2		
perdix	3	12	
consolatio	1	4	
	6	1	
	2		







aues 14 ꝙsolare ꝓqbz mittez sum ꝙsolacõm q̃ qel 7 habeb passez 10 7 colũbi 7 7 sic m ꝑdict aubz 20 et passer 11 7 colũbes 44 pduces 7 ut in qcõ ostẽdit. Et sciat q̃ dns potez hãc aues sanat q̃ntũ uoluĩt ꝓ tot dẽ dãs ult 1483 mtio 14 ñ possit habi aues ñ 17 7 118 Nã in aubz 17 cadit ꝑma ꝙsolatio biz. 7 su. semt. 7 in aubz 11 cadit su ꝙsolatio biz. 7 ꝑma. semt. 7 in aubz 8 cadit una q̃ ꝙsolatio semt. De eodem

Rbus pdix ualeat dẽ 12 7 colũbe 2 dẽ ꝑ dẽ 1 7 passes 4 ꝑ dẽ 1 7 uolo aues 12 ꝑ dẽus 12 g̃ hẽ moñ ad 1/4 7 ad 1/2 7 ad 2 7 uolo fac̃ moñ ad 1 fac d pdicabz 7 passibz ꝙsolatiõm pma. 7 cer aues 7 ꝑ dẽus 7 .s. passes 4 7 pduces 2 7 de pdicabz 7 colũb. fac sum. 7 cer aues 2 ꝑ dẽus 2 .s. colũbe 2 7 pduc 1 Et q̃ cũ pis duabz ꝙsolatiõibz. ñ possim aues 12 integriu ꝑ dẽus 12 ꝙsolaco ꝙsolabim cũ eis aues 2 4 .s. duplũ d aubz 12 mqbz cadit ꝑma ꝙsolatio 6 su semt. Qr excipis aubz 2 4 et pduces 10 7 colũbe 2 7 passes 12 q̃ nũ ad sit pares possit integliẽ dimidiare. Qr dimidia eoz 7 hẽb pduces 4 7 colũba 1 7 passes 6 hẽ aues 12 ꝑ dẽus 12 Et si ꝓnet qd colũba ualeat ẽ dẽ 1 tẽ ñ dignẽ ñ ꝑma ꝙsolatiõm mq̃ pduces 2 7 passes 4 ꝑ dẽu 7 Re sidue aues 4 et colũbe. 7 si excipis uis ꝙsolare aues 100 ꝑ dẽus 100 potez mittẽ ꝑma ꝙsolatiõm quotiẽ uoluis donec 100 excedat ſuma ꝙsolatio nũ. 7 q̃ d 100 remanserint et colũbe. De eodem gi cũ gña auiũ sit quatuor.

Item pdix ualeat dẽ 2 colũba 2 turt dẽ 1/2 passer dẽ 1/4 7 uolo ꝯcedi aucẽ 20 ꝑ dẽus 20 fac ꝑma ꝙsolatiõm excipiabz 7 passibz. 7 habeb aues 11 .s. pduces 2 7 passes 8 7 isu ꝙsolatõe et turtures 2 7 colũba 1 hẽ aues 2 Et q̃ cebis duabz ꝙsolatiõibz ñ possit aues 20. ꝙsolari cũ excẽtu ꝑma ꝙsolatõe d 20 semel 7 bis ñ remaneat nũs diuisibil ꝑ 2 .s. ꝑ ſuma se ꝙsolatiõz. Jdeo oportet mutare ꝙsolatõz. fiat itaq ꝙsolatio tua et colũb 7 pis filiz. 7 habeb aues 7 .s. colũbas 2 7 passes 4 remanebũt ꝑ q̃rta ꝙsolatõe aues. 4 .s. tures 4 7 pdix 1 dni in hõibz filiabz q̃mlz debez mittẽ. pma ꝙsolatione 7 sum ut tua 7 quarta semt. 7 hic studas supplere ſuma q̃ situ sedm qd sorz accidit cũ aliq̃. ut aliqbz excipis. Vbi gia. ponam ſuma ꝑme ꝙsolatõis 7 se semel et auel 12 qbz excẽtis d 20 remanet 16 ad ꝙ landũ in qbz cadit semt ꝑma ꝙsolatio 7 q̃rta. seu ẽ sum ꝙsolatio. 7 tua semt. g̃ in pis 20 aubz cadit ꝑma ꝙsolatio bis. 7 sum 7 quarta semt 7 sic hẽb pduces 7 7 colũba 1 7 tures 6 passes 16 ut mutatim semt in pis 20 aubz tua 7 quarta ꝙsolatiõm 7 cer aues 12 qbz excẽtis d 20 remanẽt aues 18 iqbz cadit semel ꝑma ꝙsolatio 7 tua. ut quarta ꝙsolatio ẽ. 7 su semel. 7 sic hẽb pduces 4 colũbas 6 tures 4 passes 16 7 sic possit ꝙsolari diuisis modis cũ gña sit 4 ut pla. Et nota al exemplo gñe auiũ ponat aues 1 ꝑ dẽ 1 hic leuissima ẽ qstio. quia relinques ipm genus 7 detrahas facias ꝙsolatiõz qual mittez supplẽdo ſuma q̃ſita de genẽ relicto. Jap Capitlm duodecimũ

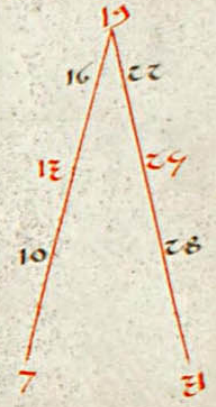
Aptauꝫ itaq; duodecimꝰ d qbꝰ albuca i pᵃtes nouē diuidit.
Quarꝰ ꝓma ē d collectoꝰ nuꝰ q qꝰ dā aliaꝫ situ qnum. 70
Secꝰ de ꝓportionꝰ nuꝰ 71 ꝯ regulā quāte ꝓportionis. 72
Tertia d qꝰ arboꝰ atq; aliaꝫ situ quaꝫ solutēs fiūt
Quarta de mutatione bursaum. 89
Quinta d empcē equoꝰ mutē glocq; sedm datam ꝓportiōm 96
Sexta d uiagus atq; eaꝫ qꝰ dā situdine uiagoꝰ qꝰ. 110
Septima d reliq̄ cautelaꝫ q ad mutuē meoꝫ regulis uarientur. 119 enarcis
Octaua d quibꝫ dam mduumationibꝫ 122
Nona d duplicatē fenderu q quibꝫ aliis qꝰ. Explicaūt ꝓpᵒˢ xii. capᵗ 126.

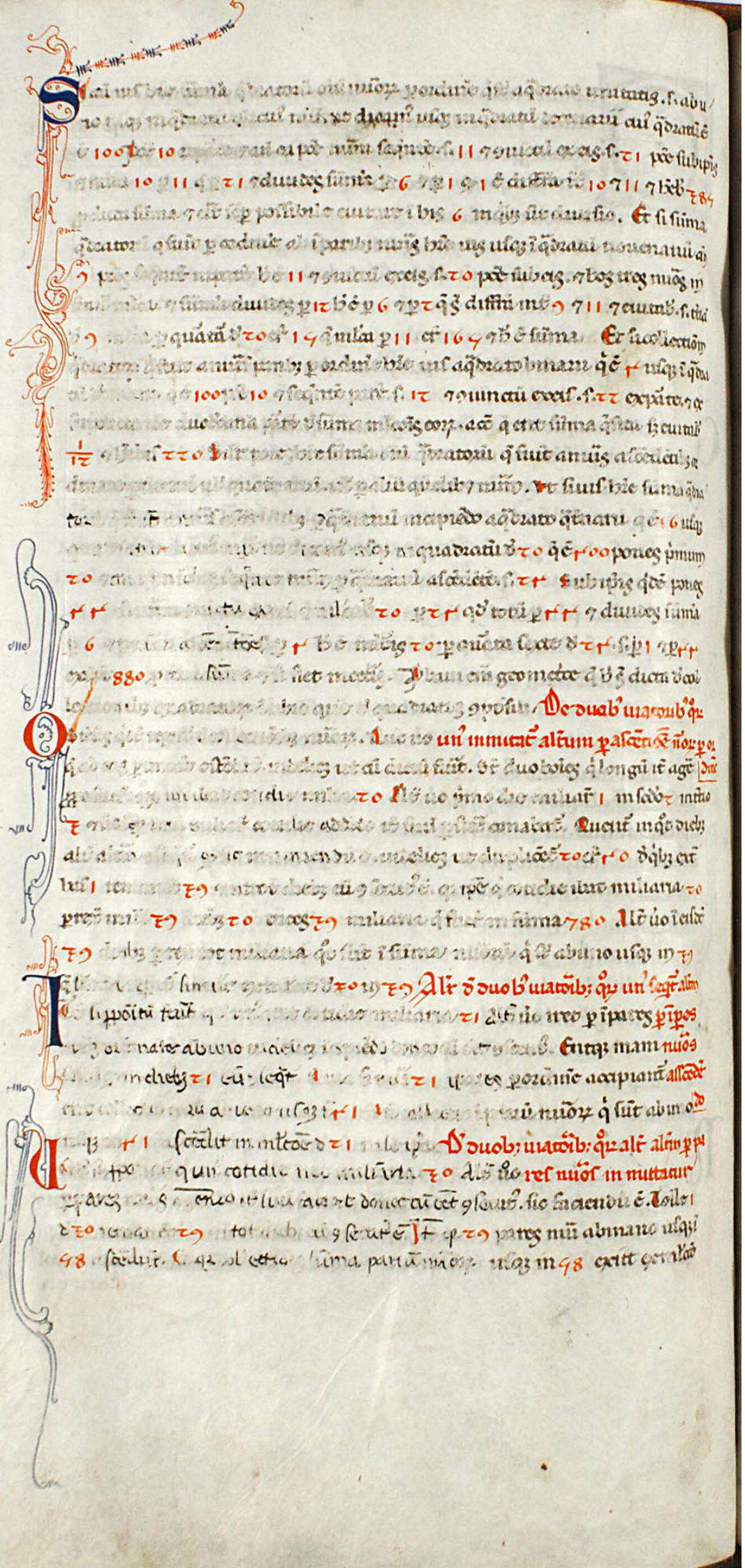
Incipit ꝓma d collectoꝰ nuꝰ

Cum aliꝰ uirꝰ aliquē datū nūm colligē nuꝰ q traq; ascēdētes
nuꝰ eqlē ut pascēlionē unitatis. ul binariꝰ. ul ternarii. ul alterius
dimidii mltitudinis auctoꝝ nuꝝ i collectē poītoꝫ p gumenū
mg mltā dimidii sume extremoꝫ. s. ꝓmi q ultimi nūi p nūm mltās
nuꝰ ducās. q habeb ꝓpositū. Vbi gñ. uolo colligē 17 q ascēdēt ꝓma
nul abrīo septenario usq; in 17 ut 7 q 10 q 17 q dmoeps usq; in 71 exclusiue
q quidē nuꝰ ꝓdictoꝝ ē q hēg notē nūi ꝯ medietē collectē. equibꝫ
unꝰ ē septenarꝰ. Reliq̄ aū ꝯ ecce q habē extrema d 71 q numerē d 71 q tās
mi q Conuictū itaq; extremis. s. d 7 q 71 q 78 qr sumā nūi dimidii d
q 78 ul dimidii d 78 p q retinet 171 ꝓsima collectoꝝ nouē ꝓpoītoꝝ
nuꝰ phē quidē regulā possūt mueni collectones sub tēpe
dmonstratiuus alio ō. De eodem Alio modo

Simul colligē aliquot nuꝰ q ordinate ascēdēt aut ascēsionē p unitatis in
apiendo ab uno. ul pascēlionē binarii inapiendo aut aut p ascēsionē ali
cuiꝰ alterius nūi inapiendo ab eo ultimū nūm p primū dimi. excessus
one unius addē q qd pueniet sua ipīnq; p dimidii ultimi nūi. ul ultimi
nūm p dimidii sue Vbi gñ. uolo colligē oēs nuꝰ q ꝯ ab uno usq;
in 60 dimidii q 60 p 1 q qd inde fiēt addi 1 erit 61 q mltā p dimidii d 60 ul
60 mltā p dimidii d 61 ut met 1830 ꝓsima ducte collectionis. Siue ꝯ a
binario colligē uel nuꝰ q ascenduꝫ p binarii usq; i 60 hō patet nuꝰ di
uid 60 p 2 sup addē 1 erit 31 q mltā p dimidii d 60 similiē si uel colligē
a 3 usq; in 60 ascēdendo p ternarii ut 3 q 63 q unū pᵗ tria pcte d 60 ad 1
p dimidii d 60 mltā erit 630 q ita intelligas in reliquis similibus

Item si impares nuꝰ tm inapiendo ab 1 usq; in aliū quēlibꝫ nūm colligē uis
pares p regulā pcte pcedē. Vt qd inde ē dimidii sume extremoꝫ ipse mltā q
habeb ꝓpositū. Vbi gñ. ut simul colligē impares nuꝰ q ab 1 usq; in 19 d
midii sume q extremoꝝ extremoꝫ. s. 19 in se mltā. s. innumm mltā
ipōꝝ nuꝰ. Ita impares nūi q ab 1 usq; i 19 fiūt acē erabē 100





71

[illegible] 60 [illegible] Aliter cum unus imitatur alterum per ternariam ascensionem vel alicuius alii numeri.

[illegible] 60 [illegible] 60 [illegible] 60 [illegible] 60 [illegible] 60 [illegible] 60 [illegible] 117 [illegible] 117 [illegible] 60 [illegible] 60 [illegible] 60 De eodem per quinariam ascensionem

[illegible] 60 [illegible] Aliter cum numerus aliorum miliarium illius qui cotidie vadit equaliter per ascensionem alterius integraliter non dividatur

[illegible] 10 [illegible] 10 [illegible] 6 [illegible] 4 [illegible] miliaria 40 [illegible] 4 [illegible] 4 [illegible] 4 [illegible] 18 [illegible] 10 [illegible] 10 [illegible] 18 [illegible] 8 [illegible] 4 [illegible] 4 [illegible] 4 [illegible] 4 [illegible] 8 [illegible] 4 [illegible] 4 proportionibus numerorum

[illegible] Incipit pars secunda de proportionibus [illegible]

[illegible] 8 [illegible] 4 [illegible] 8 [illegible] 4 [illegible] 8 [illegible] 4 [illegible] 9 [illegible] 16 [illegible] 16 [illegible] 4 [illegible] 8 [illegible] 4 [illegible] 8 [illegible] 4 [illegible] 8 [illegible]

Dies 3 9

Dies 2 2

Dies 5/8 4

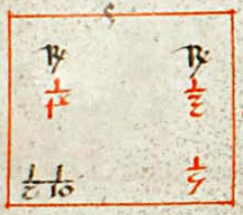
Dies 5/8 4

.p.porno 10

.p.porno 1 1/2

.p.porno 1/2 1/4

.p.porno 1/2 1/4 .p.scdm



fuit m tria una ꝫportionis q: z ſt tria d 9 7 4 ad 16 ſt m 7/16 una integre ꝫportionis. q: 4 diuiſim 16 nummꝰ 7/16 una integri rectilinee.

Sequitur d 6 ad quę nūm eandē habet ꝫportionem qua z ad 4 ſic faciēs. octo 4 per 6 ci z 6 q diuidit per z habet 10 q ſunt quinq nūs q: ſic z ſt ad 4 ita 6 ſt ad 10 ſolet ꝺ ecclſiaſticis nūmulgarib habitudinē eandē quam alię ꝫportiones. ut dicitur ſi z eſſent 4 quadrata eſſent 6 7 ei ita ꝫportionē mathematicalis 4 per 6 7 diuidens ſuum

Item sequitur d 11 ad quę nūm habitudinē eandē ꝫportionem quia 4 ad 9 hꝫ ſm medium multiplicatē ſi 4 eſſent 9 quinq eſſent 11 octonarius 9 per 11 7 diuidens per 4 habet 2 3/4 per quotum nūm Modus alius de ꝫportionib ſic.

Sequitur fuit ꝺ q ſi 7 eſſent diuidua d 12 quinq eſſet diuidua d 10 hꝫ eſſe poſſito duplicia ꝺ poſſe intelligi. uidelicet ei diuiſa ſi 7 eſſent diuidua d 12 aut intelligit q medietas d 12 qę 6 erasat in 7 aut 7 diminuit indiuidua d 12 hꝫ ē in 6 Vñ ſi 6 q ſunt diuidua d 12 erasat in 7 ergo 7 diuidua d 10 erasset. 7 nō alia regula indigeb. multiplicatē per 10 7 diuidens per 12 habet 5/6 per dimidium d 10 7 ſi intelligē uolum q 7 minuant in 6 hꝫ ē in medietate d 12 Ergo 7 medietas d 10 minuet. 7 ē multiplicatē per diuidua d 10 .ſ. per 4 et z q diuidens per 7 habet 1 1/7 7 tm eſſent. uic diuidua d 10 Et ſic ſimiles quęs per quale uolui medii ex duobz ꝑſcriptis mediis ſolui poſſe. Tam nos ſemp uidimur per primum modū mutuantibz reſpondē.

Si 1/2 eſſet 1/4 quinq eſſet 1/4 hec quęſtio talē. qualē ſi diceret 1/2 unius pedis. per 1/4 unius b. quinquagenalē 1/4 unius pedis. Quę ſcienda ē hꝫ quęſtio ad modū negotiatoris 7 opinor ſecūm qđ nō ſimulabz in octauo capitulo docuimus.

Si quatuor inuenire quattuor integros nūos ꝫportionales quorū prim ſit ad ſecundū. ſicut tertius ad quartū. hꝫ ē quęrere uel partes erunt prime nūi d ſo ead parte. uel partes ſint tertii nūi d quarto. uel qua multiplex fuit prim d ſecundo. tā multiplex ſit tertius d quarto nūo. pones primo 7 ſecundo nūos duos nuos ad libitū quales uis. Sint prim z ſecūs 7 primo nūo pone nūm q poſſit diuidi integre per primū nūm. Sint 6 7 diuidat 6 per primū nūm .ſ. per z et erit z per quotū nūm .ſ. 7 et 14 hꝫ ē quotus nūs. Vbi gratia. Sint ei z 7 tertius ſeptem. Sit 7 6 d 14 ſt 3/7 potes 7 14 hec per primo nūo 6 per ſecundo 7 per tertio z per quarto. qr qua multiplicat 14 d 6 tm multiplicat ſt 7 d z ſt ei 14 bis tm 7 tertia 16 7 tm multiplicat 7 d z 7 notandū ei quattuor nūi perfecto ordine ꝫportionales fuisse primum ad tertium ſicut ſecundus ad quartum. hꝫ ei primus z ad tertium 6 ſic ſecundus 7 ad quartum 14 dimidium ē enim unius q ſequitur ad unitatē ſi unitates ſint ſequales. 7 notandū uerum q in quattuor ꝫportionalibz nūis ſep ſit multiplicatio prim nūi in quartum nūm equalis multiplicationi ſecundi in tertium. Vbi multiplicatio d z in 14 facit quartum nūm multiplicatio d 6 in 7

Item ſit ſicut prim nūs ad ſm 7 tertius ad quartum. ita quinq ad ſextum. multiplicatus primus quattuor nūis ꝫportionalibz ut ſupra pones quintum nūm ad libitum q duplicatus per primum nūm. ſit 14 quo diuiſo per z habet quotum 7 per q multiplicatus ſecundum

Et nūm 7 cntr 2 4 que sunt sextus nūs.

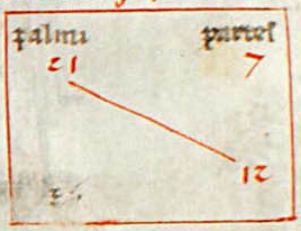
Si ponat dundē 10 in qttuor in eisdēs pūtes ꝓportionales. s. q̄ mlcata p̄
ma in quātū ducat mlcōm se mtuā. inuenies p̄mū qttuor nuōs ꝓportiōales
sitos 2 7 7 6 7 1 4 7 adde eos msimt̄ er 2 0 erūt 10 sē tria pua. Cui acci
pies tria pua de qttuor potis nūs. 7 bēb ꝑ p̄ma pua 1 ꝑs 1/2 2 ꝑ tia 2
ꝑ quāta 2/4 7 sic al q̄ tal ꝓportio. ꝓportionalis appllat. Est eīm q̄dā alia
ꝓportio q̄ uocat̄ omnia in q̄os nūs sē muta 7 cate p ordinē ad minūē ꝓpō
tiōm uidelicz. sic p̄mus nūs ē ad ꝓm. ita sedus ad tiū. 7 tius ad quātū. 7 quā
tus ad quintū 7 deinceps p ordinē ē unus quisq; ad unum quēq;

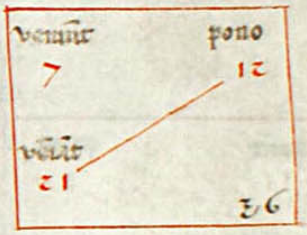
Si uolūt minuere nuos quotūcūq; in omnia ꝓportē. pōe p̄mū nūm qualem
uis. sm aliquē mlcē p̄mi. ut duplū ut ꝑplū aut aliū quē uis mlcem et
pōes tiū tāmlcem sedi quā mltplex fuerit sedus ex p̄mo nuō. Sūr quam
mltplex fuit tii sō. tā mltphā pōe quātū ttio. 7 q̄ntū quātus. 7 unū quēq;
duo quoq; suo anteced̄te. Vbi gīa. Volumus q̄nq; nuos in omnia ꝓportiona
lium ponere. Dico quidē p̄mus exūs 1 sedus 2 .s. duplus p̄mi. tii. duplus sedi
.s. 4 quātus duplus tii. s. 8 q̄ntus duplus quātus. s. 16 ē eīs 1 2 4 8 16 Sūr sic 16 sē duplus 8 ita 8 ꝺduplus 4 7
4 8 2 7 1 7 sic potes ponē unū quēq; nuōr ꝑplū. ut aliū quē uis mlti
plicē sm anteced̄tis inuenies. Et notandū q̄ ai tres nūi omnes ꝓportiōales
fuūt. erit mlcatus p̄mi in tiū q̄ntus mlcatus sedi in se ipm. Vbi gīa sit
in omnia ꝓportiōe 2 7 9 7 7 ē eīs mlcatus 2 in 7 q̄ntus mlcatus 2
9 in se ipm. s. 8 1 7 ai qttuor nuī omnes ꝓportiōales sē. fiet mlcatus
p̄mi. in qrtū. q̄ntus mlcatus sedi in tiū. 7 mlcatus p̄mi in tiū. q̄ntum
mlcatus sedi in se ipm. 7 mlcatus sedi in qrtū. q̄ntus mlcatus tii in se ipm.
Vtpote p̄mus nūs fuit 1 sedus 2 tius 4 qrtus 8 potis cognoscē in pīs q̄ditm. Si
multe ai pies nūi omnes ꝓportiōales. sit. ē semp mlcatus extremoꝝ eqlē
mlcatui reliquoꝝ extremoꝝ. 7 ita usq; q̄ nō remanebit nus in medio ꝓpor
tionalium nuoꝝ. Vbi gīa. Si noue nui ꝓportiōales fuūt. erit mlcatus p̄mi
nūi mnonū q̄ntus mlcatus sedi in octauū. 7 tius in septimū. 7 qrtus in sextum
7 q̄ntus q̄ ē in medio ꝓpōnioīs in se ipm ad aiū tres tiu decimā sit noue nui in
omnia ꝓportiōe 1 2 4 8 16 32 64 128 256 ē eīs mlcatus
2 in 64 q̄ntus mlcatus 2 in 128 4 de 4 in 64 7 8 in 32 7 16 mlti
plicēs eīs secundū mathīa mlcādi figuram quā decimā in sedo capitulo ut iedē
capitulo continetur.

Si q̄nq; inuenire duos nuos quoꝝ 2/7 unius sit 2/3 alterius mlcatus in cauo 7
p 2 8 p 2 7 habeb ꝑ p̄mo nuō 1 ꝑ sedo 16 sē 6 eīs 2/7 2 1 7/8 2 16 ꝑ
edūt ē b regla ꝓblis q̄ secūt̄ q 2/7 2 1/8 cuilibet nāi sē q̄ntus 2/8 2 2/7 elige nui
rii ai mlcandi 7 ꝑ tē accepīm 2/8 2 4 6 4 6 fiunt ex mlcatōe eoꝝdē 7 in
8 q̄s sub ugul. q. q. ꝓpōnio ē 2 7 ad 8 end ꝓportē ex septies 7 ad septies 8

4 sunt ad 6 ita quadruplum de 4 s. 20 sunt ad quadruplum de 6 s. ad 24 [illegible] pa-
[illegible] 14 ad [illegible] 20 sic 3 [illegible] ad 4 [illegible] 20 ad [illegible] 24 [illegible] 4 ad 6 [illegible]

Et si proponatur quod numeri sint quattuor [illegible] primus [illegible] ulterius sint [illegible]
[illegible] 2/4 [illegible] numeri sint 3/7 [illegible] numeri inveniens primum [illegible] 14 [illegible] 20 [illegible] 24
[illegible] inveniens duos numeros [illegible] 2/4 [illegible] sint 3/7 [illegible] 14 [illegible] 14 [illegible]
[illegible] numeros ut hic ostenditur [illegible] 14 [illegible] 24 [illegible] 14 [illegible] 20 [illegible] 24 [illegible] 24
14 [illegible] primum numerum 224 [illegible] 300 [illegible] 360 [illegible] 336 [illegible] numeri ad [illegible]
sic 14 sunt ad 14 [illegible] 2/4 [illegible] 3/7 [illegible] sic potes [illegible] numeros [illegible]
proportionibus invenire. Incipit pars tertia de quibus arborum et similium quare solutiones fiunt.





primus	secundus	tertius	quartus
224	300	360	336
		14	14
14	20	24	

Est arbor cuius 1/4 1/3 latet sub [illegible] palmi 21 [illegible] longitudo
[illegible] 1/4 1/3 reperiuntur in 12 [illegible] arbore [illegible] 12 [illegible]
[illegible] partes 7 [illegible] palmi 21 [illegible] proportionaliter [illegible] 7 ad 21 [illegible] 12
ad longitudinem arboris. [illegible] quattuor numeri [illegible] proportionales [illegible]
[illegible] 21 [illegible] 12 notos [illegible] primum
numerum [illegible] 7 [illegible] 36 [illegible] quarto ignoto [illegible]
[illegible] 21 [illegible] 7 [illegible] 12 [illegible] 36

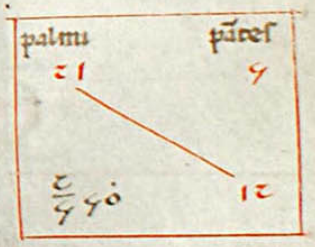
palmi	partes
21	7
	12
36	

Et [illegible] modus [illegible] ut [illegible] ignota [illegible]
[illegible] integraliter [illegible] proportionem [illegible]
[illegible] longitudo arboris [illegible] 12 [illegible] 1/4 1/3 [illegible] 12 [illegible] 7 [illegible] 21
[illegible] 12 [illegible] 7 [illegible]
[illegible] 21 [illegible] proportionaliter [illegible] 7 ad 21 [illegible] 12 ad 36 [illegible]
[illegible] 12 [illegible] 7 [illegible] 21 [illegible]
[illegible] 12 [illegible] 21 [illegible]

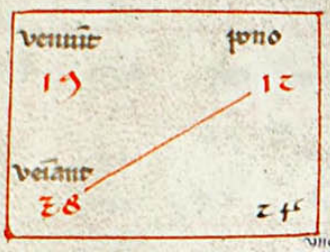
veniunt	pono
7	12
veniunt 21	
	36

Item est arbor cuius 1/4 1/3 latet sub [illegible] De arbore de qua cum extrahitur 1/4 1/3 remanent 12.
Residuum [illegible] 21 [illegible] 12 [illegible] 1/4 1/3 [illegible] partes septem remanent partes 4 [illegible]
[illegible] palmis 21 [illegible] 4 [illegible] 21 [illegible] 12 [illegible]
[illegible] 12 [illegible] 21 [illegible] 4 [illegible] 2/4 40 [illegible]
arbore [illegible] palmis 12 [illegible] 1/4 1/3 [illegible] 7 [illegible] 4 [illegible]
[illegible] 12 [illegible] 4 [illegible] 21 [illegible]
[illegible] 12 [illegible] 21 [illegible] 2/4 40 [illegible]
7/12 [illegible] 4/12 [illegible] 4/12 [illegible] 2/4 40 [illegible]
[illegible] 4/12 [illegible] 48 [illegible] 1/12 [illegible] 48 [illegible] 4 [illegible] 20 [illegible] 48 [illegible] 2/4 40
[illegible] 2/4 [illegible] 12 [illegible] 4/12 [illegible] 4 [illegible]
[illegible] 20 [illegible] 21 [illegible] 1/4 1/3 [illegible] 2/4 40 [illegible] 21 [illegible]
[illegible] 2/4 40 [illegible] 4 [illegible] 12 [illegible] 24 [illegible] 12 [illegible] 21 [illegible] 2/4 40 [illegible]
[illegible] 24 [illegible] 1/4 1/3 [illegible] 84 [illegible] 63 [illegible] 104 [illegible]

palmi	partes
21	4
2/4 40	12

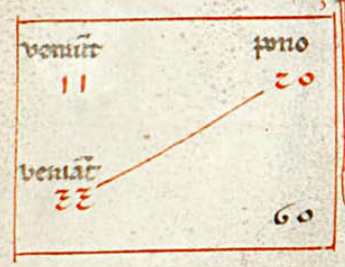


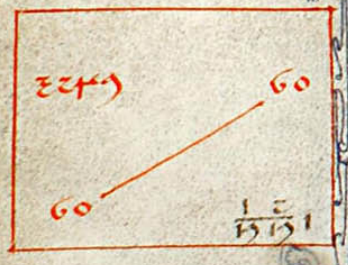
palmi q̄ sē sit tertiꝰ. bē palmꝰ. 12 De arbore l' nūo sup q̄ si addāt fiāt ½ ⅓ ēt 18
Tem si dixīs qđ addita ½ ⅓ ipi arboris sit arbore ei 18 pōs 7 suspicetꝰ đmon
stratē se regle ut illa arbor sit 12 đ q̄bꝫ acē ½ ⅓ .s. 7 adde sit 12 ei 19 q̄ az
uellēt cē 18 dicoꝫ p 12 q̄ pono p q̄ntitate arboꝫ uenit ī sūma 19 qđ ponā
ut uenāt ī eadē sūma 18 mlāb ē 12 p 18 .s. pmū nūm p ulamū. 7 diuđ
p 19 .s. p sm q̄ pil diuđ 18 p 19 exibit 1 q̄ mlām p 12 exibit 1 p ipius arb
is longitudiē. Vbi grā ½ ⅓ đ 1 sē 12 q̄bꝫ additis ai 1 facit 18 q̄b ad
lumus illud eā idem erit sicut ē nūs sup quē si addidens ½ ⅓ ipi fiet 18



Rursus ē arbor de arbore l' đ nūo sup q̄ si addat residuū đ ½ ⅓ ipi surgent 41.
đ q̄ exibit ½ ⅓ si residuū additū sit ipām arbori surgent in 41 q̄ut
illi arboris q̄ntitatis, q̄r ai đ ipi q̄ntitate q̄ntitate pōt ut ipa sit 12 exibit
in ½ ⅓ .s. 7 remanēt 4 q̄bꝫ additis ai 12 fiūt 17 q̄ ai uellet cē 41 dicoꝫ p
12 q̄ pono uenit 17 qđ ponā ut uenāt 41 mlām 12 p 41 7 diuđ p 17 ul' di
uđ 41 p 17 exibit 2 q̄ mlām p 12 redlēt p q̄ntitate arboꝫ 26 Vbi grā. exibit
½ ⅓ đ 26 q̄ sē 21 remanēt 14 q̄bꝫ additis ai 26 redlē 41 ut q̄rebat. Illud
eā idē ē si dicatꝫ ē nūs sup quē si addidens residuū de ½ ⅓ ipius surgent

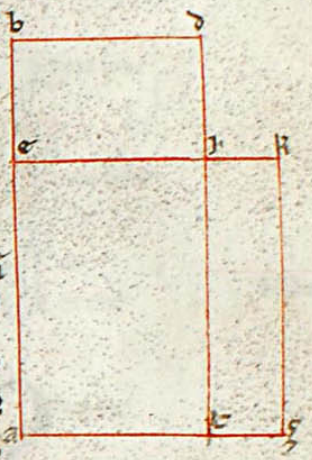
Im De arbore l' nūo aul ⅘ ½ ⅓ sē 22 plus arbore ul' numero
Tem ē arbor đ quo acceptis ⅘ ½ ⅓ 7 đ collecta q̄ntitate si excreverit q̄ntitas
illi arboris remanēt 22 q̄ut tuc sit q̄ntitas illi arboꝫ longitudo. 7 ai đ ipi
q̄ntē lōgitudiē. pōt ut ipa sit 20 10 q̄ in 20 reperiūt ⅘ ½ ⅓ đ q̄bꝫ 20 acē ⅘ ½ ⅓ ē
21 đ q̄bꝫ exurabe pōtū nūm p q̄ntitate arboꝫ .s. 20 remanēt 11 q̄ ai uellit
cē 22 dicoꝫ p 20 q̄ pono in q̄ntitate arboꝫ p uenit 11 qđ ponā ut p ue
nāt 22 mlāb 20 p 22 7 diuđ p 11 q̄r diuđ 22 p 11 exibit 2 q̄ mlām p 20
exibit 60 7 tot palmoꝫ ē arbor illa. Vbi grā ½ ⅓ đ 60 sē 24 7 ⅘ ½ ⅓ đ 60 sē 48 q̄bꝫ
insimul uitis facit 72 đ q̄bꝫ si excreverit q̄ntitatē arboris idē 60 remanebit
22 ut q̄situ ē. Sit ē illud idē si dicatꝫ ē nūs đ q̄ si acceptis ⅘ ½ ⅓ faciēt ulē ipm
nūm 22 q̄ nūs ē silr. 60 Sephanus q̄dē arboꝫ regul'. nō uo adcap con
similes accedam. De inuentione aud̄am nūi de quo ⅓ ⅙ ½ ⅓ ipi sit exdem
Est nūs đ q̄ si acceptis ½ ⅙ ½ ⅓ 7 sūmā q̄ excrescit si inse ipam mlāuīs faciat eidē nūi.
cūdē nūm. bē qđ erit tradit illi nūi. q̄ntē quis sit nūs ille. Q̄r poss inuē
ut sit 60 đ q̄bꝫ acē ½ ⅙ ½ ⅓ q̄ sē 47 7 mlāta ea in semetipa erit 2209 q̄uellāt
cē 60 dicēs p 60 q̄ pono p q̄ntitate nūi uenit 2209 qđ ponā ut p uenāt
đ 60 mlāb ītaq 60 p 60 faciēt 3600 q̄ diuidēs p regulā đ 2209 q̄ē
1/19 0/19 0/19 exibit 1/19 2/19 9 tot ē nūs ille. Vbi grā. mlāta 1 p 19 7 sē adde 2 q̄ sit,
sē 19 q̄ mlāta p aluī 19 7 sē adde 1 erit 400 q̄ sē mie 0/19 b̄ē ingēiculmo seruge
sume p me q admaiorē intelligētiā sēbant sic 400/361 đ q̄bꝫ acē ½ ⅙ ½ ⅓ q̄sit
380/361 b̄ē 20/19 q̄bꝫ inse ipis mlātis redlē exibit 400/361 b̄ē 1/19 2/19 1 ut q̄rebam
Sit q̄ ½ ⅙ ½ ⅓ .s. 12/20 ipius nūi inse mlātis faciūt ipm nūm. muenis
nūm q̄ mlāto p 12/20 faciat 1 q̄ muenies si diuidis 1 p 12/20 .s. 20 p 19 exibit





7 1ª

liꝫ ꝓuenit 20/10 q̃ꝫ mdix q̃lia nũ ut dicam. q̃lz mse mlcauꝰ facit̃ 400/761 ꝓ
q̃lto nũo. qđ q̃ dmonstrabo aĩ figura geometꝛica. Sit duacta q̃dꝫ lnea. a.b.
ꝓq̃lto nũo. sꝛ quã ostituat̃ supficiꝫ recti anglꝫ. a.d. latitudiĩ facięꝫ lnea
am. a.e. q̃ sit 1. qꝛ supficiꝫ. a.d. ẽ nũꝰ q̃liꝫ. qꝛ ex. e. a. in. a.b. ꝓuenit
nũꝰ. a.b. q̃ ẽ nũꝰ q̃liꝫ. 7 sũmat̃ exnũo. a.b. nũꝰ. a. e. q̃ sit 19/20 nũ. a.b. Et
qꝛ exducta. a.e. in se ꝓmit̃ ꝓuenit nũm. a.b. oꝝ amfectũ ẽ qđ nuꝫ. a.e.
maior ẽ unitate aĩ maior sit nũꝫ. a.b. nũo. a. e. qꝛ maior ẽ. a.e. unita
te. a.e. 7 ostituat̃ sꝛ recta. a.e. tꝛigonũ. e.z. Et q̃m exducta 19/20 nũ q̃li
t in se ꝓuenit nũꝰ q̃liꝫ. g̃ exducta. a.e. in se ꝓuenit nuꝫ. a.d. ꝫ exduc
ta. a.e. in se ꝓuenit tꝛigonũ. e.z. g̃. e.z. equal̃ ẽ nũo. a.d. g̃ nũꝰ. e.z.
ẽ nũꝰ q̃liꝫ. 7 munit̃ auferat̃ nũꝰ. a.z. remanebit̃ nuꝫ. z.b. equal̃ nũo. t.k.
ꝫ. b.z. sit exducta. e.t. in z.d. qꝛ recti anglꝫ ẽ. supficiꝫ. b.z. Et exducta
qđ. t.z. in z.k. ꝓuenit supficiꝫ recti anglꝫ. t.k. ꝓportionalęꝫ. g̃ sꝛ nũ
t. z.z. d. e.z. z.k. 7 ẽ. e.z. unũ aĩ sit eiꝫ unitatꝫ. a.t. 7 ẽ sic̃ mus. t.t. ꝑm
ad ꝑm. z.d. ita tt. e.z. ad qꝛtũ. z.k. qꝛ erit. sic̃. t.z. ad. t.d. bõ sic̃. a.e.
ad. a.b. ita unitas. e.t. ad nũm. e.k. b ẽ ad nũm. a.e. ꝫ. a.e. ad. a.b
ẽ sic̃ 19 ad 20 Qꝛ 7. e.z. ad. e.k. ẽ sic̃ 19 ad 20 qꝛ mlamta ẽ unitaꝫ. e.z.
ꝑ 20 7 sũma ẽ diuidẽda ꝑ 19 7 ꝓducet 20/19 ꝓ nũo. e.k. b ẽ ꝓ nũo. e. a. ut
oꝑtebat ostẽdẽ



Q̃ inuentoꝝ nũ cui mdꝫ ẽ ꝛeq̃uũ d 1/6 1/7 1/12 1/72 ipsius
ẽ nuꝰ d quo si extrayãs 1/6 1/7 1/12 1/72 7 relicduũ in se ipm mlcauꝫ. facet eiꝫ
numm. b ẽ q̃ erit mdix illi nũ. Quent̃ q̃nq̃ sit muꝫ ille. ꝑẽ g̃ ut sit 60
ꝑo qꝛ m 60 repũt̃ 1/6 1/7 1/12 1/72 d nũ ad 1/2 d 60. s. 20 7 1/12 d 60. s. 10 7 1/7 d 60
s. 8 7 1/6 d 60. s. 10 7 adde ea in simꝫ erũt 47 q̃ excũbe d 60 remanet 7 q̃
mlce. se facit̃ q̃ uellẽt eẽ 60 Qꝛ ducę ꝑ 60 q̃ pono uenit̃ q̃ qđ
ꝑpũ ut uenãt 60 mlcaꝫ g̃ 60 ꝑ 60 7 duidęꝫ ꝑ exibit 100 ꝫ aĩ regla
d sit 1/2 d 1/2 duus unũ d illꝫ 60 ꝑ 7 exibit 20 Jtem diuidęꝫ alia 60 pala
7 q̃m regla remanẽt d exibit simlit 20 quibꝫ in simꝫ mlcauꝰ reddꝫ
simlit 100 Et tot ẽ muꝫ ille. Vbi gñ. exnabe 1/6 1/7 1/12 1/72 d 100. s. 80 rema
nebit 20 q̃ ti mse mlcauꝫ facet eadẽ 100 ut oꝑtet. Illuꝫ q̃ exãꝫ d q̃si
to nũo 1/6 1/7 1/12 eidẽ remanet 1/20 q̃ẽ mdix ipi nũ. Qꝛ exducta 1/20 mse ꝓ
ut idẽ nuꝰ. Qꝛ muenias nũm q̃ aĩ mlcauꝰ fuit ꝑ 1/20 unꝰ mręgn. ueni
at 1 quẽ inuenias si diuisis 1 ꝑ 1/20 exq̃ duuisẽ ꝓuenit̃ 20 q̃ sꝛ mdix ꝑ
ducti nũ q̃bꝫ mse mlcauꝰ reddit̃ 100 ꝓpoto nũo q̃ q̃ monstrãt̃ ꝓfigurã ge
ometꝛicam. Inuenire alĩ nũ cui aĩ sup addiẽ 1/6 1/7 1/12 1/72 ipi ẽ mdix nũ
Cum sidicaĩ fuit ẽ nuꝰ sup quẽ si adhdis 1/6 1/7 1/12 1/72 7 sũmã collectã in se ipiz
mlcauit facięt eidẽ nũm. b ẽ q. erit mdix illi. Jdẽ tnaq; ut ipse nũꝫ sit
60 sup q̃ adde 1/6 1/7 1/12 1/72 ipi id ẽ 47 erũt 117 q̃ mlcãꝫ in se erũt 168 q̃uellẽt
eẽ 60 qꝛ dicaꝫ ꝑ 60 q̃ pono in quãtitate nũꝰ ueniũ 168 q̃ qđ ponã ut
ueniãt 60 oꝝ cauꝫ 60 ꝑ 60 erũt 3600 q̃ duus ꝑ regulã d 168 exibit 1400/147 mot

numerus
100

numerus
400
121

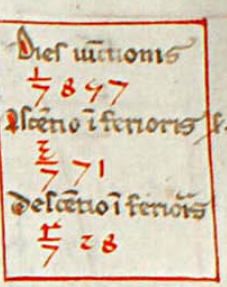
quod ponā ut q̄ppiaq̄ palma 100 mīca 60 ꝙ 100 cr 6000 q̄ duuīs ꝙ 7 exibt dies 1/7 8 47 7 mān qlet ꝙ mercē se. Sīlr si q̄libet [illegible] q̄l ꝙ augīne. sic facias mīcas 4 ℞. cōmūnis mīcas ꝙ 100 cr 400 q̄ duuīs ꝙ 7 exibt palma 2/7 71 7 tot [illegible] mīcas ꝙ. Et sic de ceteris. Et nōtandū q̄ ꝙ mīcas. sit ꝙ cuilīt 100 mīcarū 7 sīlr una ꝙ 7 duuīs exibit palma 1/7 28 ꝙ eo q̄ numeros ꝙ ꝙ aliquos pacet.

De pecus quatuor pannu

Q Vidā emit pannū pecus 1r ꝙ ploz 80 Quaꝝ ꝙmā emit alīq̄s. alīm emit 2/7 ꝙ 1 ꝙmo. Tertiū emit 2/7 ꝙ 1 ꝙ. Quārū alter emit 1/4 ꝙ 1 ꝙ. Quere q̄nti ualuit una q̄q; pecia. Iō ut ꝙma ualēt 1/4 1/7 60 nō q̄ m 60 sed minꝰ 1/4 1/7 ergo si ꝙma ualuit 60 secūda 2/7 mīl ualuit 1/4 1/7 60 7 tīa ualuit, 1/4 1/7 60 hē 2/7 ꝙ 1 ꝙ. Quarta uō ualuit 1/4 1/7 cāsus 1/4 1/7 60 Iōlen ergo 60 7 60 7 60 7 1r. s. pecia ꝙmi suꝑueniū q̄tuor ꝙ aꝝ cr 141r q̄ diuidit cē 80 dic ꝙ 60 q̄ pono ꝙ ꝙmo ꝙ 1 ꝙ uenīt i ſūma q̄tuor pecaꝝ 141r quod ponā ut uenīat tm mercīū ſūma 80 ergo 60 ꝙ 80 cr 1r 800 q̄ duuīs ꝙ regulā d 141r q̄ cē 1/2 7 0 0/11 exibt 1/4 1/7 6 1/7 11 2 1 Et sic ualuit ꝙma pecia Iō uidēs ꝙmi ſe. oſtēdit 60 ꝙ 80 7 duuīs tm ꝙ 1/2 7 0 0/11 exibt 1/4 1/7 8 1/7 11 20 ꝙ ꝙmo ſe pecie. Iō ut ſecūd ꝙmi tm ostēdit 80 ꝙ 80 7 duuīs tm ꝙ 1/2 7 0 0/11 exibt ꝙ ꝙmus ꝙ 1/4 1/7 6 1/7 11 1 9 d mīl ut ſecūd ꝙmi quārt. mīca 1r ꝙ 80 7 duuīs tm 1/2 7 0 0/11 exibt ꝙ ꝙmus mīl 1/4 1/7 1 9 7 ſecūd qd inuenīa quaꝝ ſēper q̄tuor mīcarū ē. 1/2

Alr de eodē

Alīe ne malīgat̄ b q̄libet ad regulā ſecundi dīcēbe minuēa p ordinē ſic 2/4 2/1 2/2 1 mīca ꝙ 2 q̄ ꝙ 4 q̄ 4 q̄ſ ſub ūgis cr 60 q̄ ſua. Iō mīca 2 q̄ſ 1r 2 ꝙ 1r q̄ſ ſub 2 cr 2 q̄ ꝙ 4 cr 20 q̄ ſua. Rurſus mīca 2 q̄ſ 1r 2 ꝙ 2 q̄ſ 1r cr 6 q̄ ꝙ 4 cr 20 q̄ ſua. 7 adhuc mīca 2 q̄ſ 1r 2 ꝙ 2 q̄ſ 1r cr 6 q̄ mīca ꝙ 1r q̄ſ 1r 4 cr 2 1r acde ita q̄tuor ſuaruꝝ nullꝰ minīmū. s. 60 7 20 7 20 7 2 1r cr 141r Et mutatis regulā q̄ſtui q̄ cē 1/2 7 0 0/11 7 mīca ſingl̄aūē unū q̄libet ꝙ 1 q̄ſtor q̄tuor mīcarū 7 duuīs una q̄q; mīcarū ꝙ 1/2 7 0 0/11 7 habēb ꝙ ſecūd unū aut ꝙ pecie. Iō ē ꝙ mediocritate d 141r



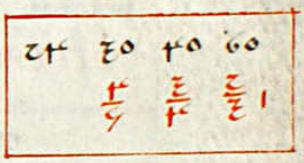
De tēcia unī nūi ex quarta cuī nūi ſit q̄rta

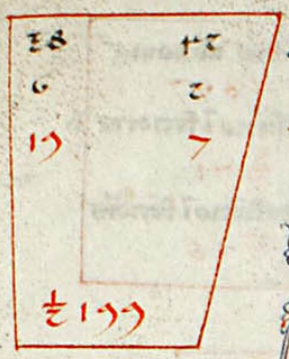
Sīlr d tēcio unī integr d aut nūi quārta ſit q̄rta ꝙns. pē ꝙ ut nūs ille ſit 60 d q̄bz ſūme 1/1 q̄ cē 14 d q̄bz aōs 1/4 q̄ cē 2 q̄ uellēt cē tōs 1/2 mīca 60 ꝙ 1/2 cr 20 q̄ duuīs ꝙ 2 exibit 2/2 6 ꝙ nullo ille.

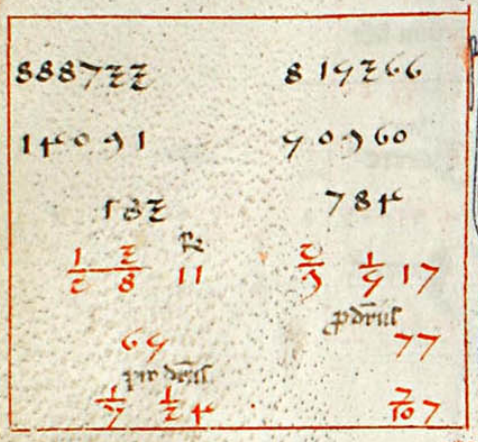
Alīe d ſcde ordinē ſic 1/4 1/1 1/2 d unī mīcā unī q̄ cē 1r ꝙ 1 q̄ cē 1r q̄ nūs 2 q̄ mīcarū cē 2 q̄ di uīdī mīcarōm d 1 q̄ cē 1r 4 m 1 q̄ cē 1r 1r q̄ nūs 2 q̄ mīcarū cē 2 exibūt ſimilit 2/2 6

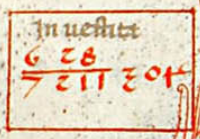
De ouis

Quidam emit ouā 7 ꝓ nūmo uno. 7 uēdidit ouā 4. ꝓ duo. 7 lucrat̄ ſunt duōz 10 q̄ quot ꝓ mouſ muſtruerit. pē ut muſtureo duōz 7 ꝓ q̄bz habuit ouā 24 q̄ uēdidit di 7 ꝙ lucratus ſunt duōz 2 inuīt̄ q̄ſ 4 q̄ duo 2 uellēt cē 10 di. oſtēdit 10 ꝙ 4 q̄ duuīs ꝙ 2 exibit duo 1/2 1r 7 tot muſtruus ſō ille. Iām materiam inuenies hāc regulā ē ꝙnec. vt diſcas a. 4 uſq; in 7 dſin









Ite mḋz duuꝺ mſcamõm ꝺ⸗ mſc ut ſuꝑdixim. De eſdē ouis
Item ſi dixēt qꝺ emit ouā ꝑ ꝓuſt ⁊ uendidit ouā ſc ꝓ ꝓtius ⁊ lucꝝ
ē dām ⁊ ḟrē ꝙt mueſtunt. ſcire qđm ſic ⁊ mſca ⁊ ꝑ ⸗ eſ ⁊ ⁊ qꝑ ſſ ⁊ ⁊
mſca ſc ꝑt eſ ⁊ q ꝑ ſſ ſc ꝑꝺ extrahe ⁊ ꝺ⸗ remanēt ⸗ mſca ⁊ ꝑ
⁊ eſ ⁊ q duuꝺ ꝑ ⸗ exabt dām ⁊ ⁊ ⁊ tot mueſtuꝝ. Et ſi ꝓnat ⁊ mu
ſtuer ꝺ ⁊ ⁊ qđnat lucrū ꝙl mſcab ⁊ ⁊ ꝑ ⸗ ⁊ duuꝺ ꝑ ⁊ habeꝝ
ꝓlucr. ⁊ De rotulꝰ ſcḋm regula ouoꝝ
Item ſi ꝓpoſuit q ꝑ ꝺnꝰ rotulos ⁊ haberet uenderet rotulos ⁊ ꝑ ꝺnꝰ
⁊ ⁊ eēt lucrū ꝺnoꝝ ⁊ ꝺſcribe qđm ꝑ qꝺ ī hac ꝑgina ꝺſcptū est
⁊ mſca ⁊ ⁊ ꝑ ſua uirgla. ⁊ ꝺſſ acde ⁊ eſ ⁊ q ꝑ ⁊ acde unū eſ ⁊
q ꝑ ſſ ⁊ ⁊ Jā mſca duoꝝ ⸗ ꝑ ⁊ acde ⁊ eſ ⁊ q ꝑ ⁊ ꝺ alīa ſua ugla eſ
⸗ ſſ q acde mſcam ꝺ ⁊ q ē ſſ ⁊ m ⁊ eſ ⁊ q ꝑ ſſ ⁊ ⁊ Rurſus mſca ⁊
⁊ ꝑ ⁊ ⁊ ſſ acde ⁊ q ꝑ ⁊ ⁊ acde mſcam ꝺ ⁊ q ē ſſ ⁊ m ⁊ eſ ⁊ q ꝑ ſup
⁊ ⁊ Jtē mſca duoꝝ ⁊ ꝑ ⁊ acde ⁊ eſ ⁊ q ꝑ ſſ ⁊ poſt h mſca
nūm poſitū ſſ ⁊ ſ ⁊ ꝑ nūm poſitū ſſ ⁊ ⁊ ⸗ ideſt ꝑ ⁊ eſ q
ꝑ ſſ ⁊ Jā mſca poſitū nūm ſſ ⁊ ſ ⁊ ꝑ poſitū nūm ſſ ⁊ ide
ꝑ ⁊ eſ q ꝑ ſſ ⁊ Jā oportet mſcam ꝑmutta q ſuꝫ
ſub ugul ꝺ ⁊ ⸗ ꝺ ⁊ ſ ꝑ ⁊ ꝙꝑ ⁊ ꝙꝑ ⁊ adhuc oportet mſcam ⁊ ꝑ
mutta q ſſ ſub ugul ꝺ ⁊ ꝺ ⸗ ſ ꝑ ⁊ ꝙꝑ ⁊ ꝙꝑ ⁊ ꝙꝑ ⁊ uñ mſcē ꝛ
⁊ ꝙꝑ ⁊ idē ꝑ ⁊ eſ ⁊ relinq q ñ mſcēs ꝑ ⁊ q rel
q mſcam ⁊ ⁊ ꝙꝑ ⁊ mḋz ipa mſcam oportuerut. ⁊ mſcab ī
ꝑ ⁊ ꝙꝑ ⁊ idē ꝑ ⁊ eſ ⁊ ꝺ qḋz extrahe ⁊ remanēt ⁊
qḋz ſcḋm regulā regle qđm ⁊ mq duuꝺ ꝑ mſcatoꝝ ꝺ ⁊ ⁊ m
⁊ ſ mlucrū. q mſcato ē ⁊ ⁊ ⁊ exabt dām ⁊ ⁊ tot m
ueſtuꝝ mlts ꝛ.
Alē duuꝺ ⁊ ꝑ ⁊ exabt ⁊ Jē duuꝺ ⁊ ꝑ ⁊ exabt ⁊
ī extrahe ꝺ ⁊ ⁊ ⁊ ſb remāſt duuꝺ mſcatoꝝ ꝺ ⁊ m ⁊ ⁊ hēḋz ꝓpoſui.
Item ſi q ꝺ uulpes q ē añ annē paſſul ⁊ paſſus ⁊ fugiebant. De anne et uulpe
uulpis. ſē paſſus ⁊ ſaltus annis. q ⁊ m q ea oſeſt. Hec eñ q ſtio eandem
retinet regulā ouoꝝ ꝺdeḋz ut extrahꝫ ⁊ ꝺ ⁊ remanēt ⁊ mq duuꝺ mſca
tionē ꝺ ī exabt paſſꝰ ⁊ ⁊ tot ḋeḋz annis fuit ea uulpe i uno puncto.
Vel ſi diſtantiā eoꝝ ignoraūſ. ⁊ ꝓponat q annis uulpē adūgat ī paſſibꝫ
mſcab ⁊ ꝑ ⁊ ꝙꝑ ⁊ duuꝺ ꝑ ꝓhiem. ⁊ De eo qui miſit filiū ī Alexandꝝ
Jē miſit filiū ſuū ī alexandriā ꝺdrꝫ ei bz ⁊ ſcḋm ꝓpēs ut emeret exeꝝ ꝑ
antꝫ bergi. Cant quidē ꝓpꝛ ꝑbz ⁊ annt bz ꝑbz ⁊ ponꝺ q ponderat
ꝑ exabt ⁊ ponꝺ bz. Queritꝫ qđ emit ꝺ ꝑ ⁊ q ꝺ bz. Jē ut emeret
bergi. cant ⁊ idē q ⁊ remāt ⁊ q uꝺ q ualēt annt ulla ⁊ ꝙꝑ
⁊ bz ⁊ quo facto ⁊ ⁊ ꝺ ⁊ q ſſ ⁊ ⁊ tot cant. pone q emiſſ
ꝑ q ualēt bz ⁊ ⁊ ai qḋz acde bz ⁊ eſ bz ⁊ ⁊ Et ducꝝ pan

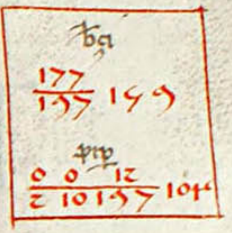
nus 6 q̄ ꝓsiuꝫ ut emẽt d̄ bz̄. uen̄ in sūma biz 240 q̄d ponā ut uemat
sūma biz 100 mīa 6 p 1000 duud p 240 quor regla ē 1 0 0 / 2 10 197 mīa no
uū d̄ amtatꝫ 6 in 100 fiuꝫ m amtatꝫ 6200 q̄ꝫ ꝑ 6200 0 0 q̄ duud p
1 0 6 / 2 10 197 exibt ꝑ 177 / 197 1 4 9 ꝙ uor emit ꝑ d̄ bz̄. Jt̄ mīa amtata 1 p 100 et
ꝑ 1000 quoꝝ duud p 1 0 0 / 2 10 197 exibũ ꝑ 0 0 12 / 2 10 197 10 ℔ 7 tiu emit d̄ piꝑ. Si
uū sare uolūt quot biz ualent piꝑ. 7 quot bz̄. mīa 2040 p 100 7 duud p
1 0 6 / 2 10 197 7 habeb ꝓmo piꝑis biz 6 / 197 4 Jt̄ mīa 1890 p 100 7 duud ꝑ ten.
1 0 0 / 2 10 197 exibunt p ꝓmo bz̄i 121 / 197 1 7

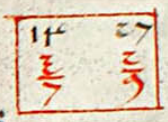
Et si stat̄ ꝑ̄ ꝓcepiſſz fluo ut 1/7 ꝛponde piꝑis eēt 1/7 ꝛponde bz̄i iuenies
ꝓmū duoꝝ nuiꝝ ꝛcqlz 1/7 uni sit 1/7 altūl erit 1 7 7 Sla 1/7 d̄ 1 7 fiat
ut q̄tuꝫ 1/7 d̄ 7 q̄r pōꝝ ut ipe emẽt d̄ piꝑe cant 1 7 d̄ bz̄i cant 7 7 opabiꝫ
ſm qd supl feam 7 inuenies quantitates utlz inas.

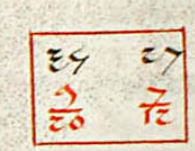
Item 1/1 7 ꝛponde piꝑis sit 1/1 7 ꝛponde bz̄i. inuenies d̄ duoꝝ nuiꝝ. ꝛcqlz
1/1 7 uni sit 1/1 altūl erit 7 7 4 Sla 1/1 d̄ 7 sit 1/1 7 1/1 d̄ 4 q̄r pōꝝ
ut ipe emẽt d̄ piꝑe cant 7 d̄ bz̄i cant 4 7 opabil ſm stiy modum.

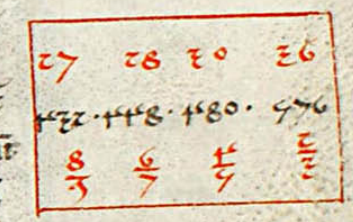
Velit ꝙ ponat d̄ ipe emiſſz ꝛ ſtiꝝ biz 100 piꝑ ad ꝛdem d̄ biz 40 7 lac ad ꝛdem
d̄ biz 40 7 d̄ bz̄i ad ratione d̄ biz 20 7 lini ad ꝛdem d̄ biz 20 Et 7/7 ꝛponde
piꝑis erit 4/7 ꝛponde lacer. Et 6/7 ꝛponde bz̄i. 7 8/7 ꝛponde lini. Jnuen
enda ſ̄ ꝓmū q̄tuoꝝ nuiꝝ ꝛcqlz 7/7 p ñ lini 4/7 sedi et 6/7 tiui 7 8/7 quarti 7
habeb ꝑ ꝓmo nuō 26 placeo 20 p tio 28 p quato 7 q̄r pōꝝ ut ipe emẽt
ꝛpiꝑe cat 26 q̄ualeꝫ b 1800 Et d̄ lacta cat 20 q̄ualeꝫ b 1200 7 d̄ bz̄i cat
28 q̄ualeꝫ biz 840 7 d̄ lino cant 7 q̄ualeꝫ b 420 q̄bz biz q̄tuoꝝ mutuo
mmū quicat facuit. b. 2380 q̄uellent eē biz 100 q̄r singl̄ant cāt 26
piꝑis. ſ. ꝛ. 2600 Et cāt 20 lacti. ſ. ꝛ. 2000 Et cāt 28 bz̄i. ſ. ꝛ 2800 7 cāt
7 lini. ſ. ꝛ. 2800 mīab ꝑ b 100 7 duudeꝝ ſūma unā aulz mīa noīs ꝑue
gulā d 2380 q̄ē 1 0 0 / 6 10 7 7 habeb ꝑ ponde piꝑis ꝛ. 14 / 7 7 82 7 ꝑ ponde lacer
ꝛ. 26 / 7 7 68 7 ꝑ ponde bz̄i ꝛ. 28 / 6 7 7 67 67 7 ꝑ ponde lini ꝛ. 28 / 7 7 61 7 sic possemus
diuinoduarias ꝑportiõs q̄ꝫ solueꝝ ſtiꝝ ordine. Appositione.

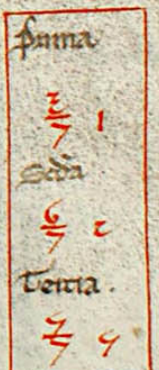
Supponat ut duudeſ 10 inatꝫ. De diuisiõe d̄ 10 t̄rb; pāb; t̄ eqlez ſm gnuā
mequalez puteꝫ. q̄ꝫ mīa mīoꝝ in maiorē facat q̄tuꝫ ſda mīa tm
ſe ipām. sic fiatꝫ pō ut ꝓma pars sit aliq̄s nūl ut 1 dui pō ut ſa pars
sit alī qualiby nūl ut duam 7 q̄ mīa unſe facuit 1 q̄ duud p 1 uenet
1 octo bz̄ ꝛs nuiꝝ. ſ. 1 7 7 1 ꝛcqlz mīa ul ꝓmo ꝑtui. ſ. 1 p 1 fuerit
q̄tuꝫ ſoꝝ in ſe ipm. ſ. 7 p 7 vñ collugat 1 7 7 1 faciuꝫ 7 q̄ ai uellet eē 10
duoꝝ p 1 q̄ pono p ꝓma illaꝝ tū partū ꝓuenit 7 in eaꝝ ſūma. q̄d ponā
p eadē ut ꝓuenat in ſūmā 10 oſtab utraq 1 p 10 q̄ duudeꝝ p 7 exibit p q̄n
tate ꝓme patuſ 1/7 1 Jt̄ mīab eadē ꝛ nō ſam pterē. ſ. p 10 eē 70 q̄d
uideꝝ ſtiꝝ p 7 exibt 6/7 7 tiū ē ſe pars. Rurſ mīab 1 ſ. ſa ꝑ ponꝝ p 10
eē 40 q̄ duudeꝝ p 7 exibt p tia parte 5/7 4 oſtatio q̄ d 1 1/7 in 5/7 4 ē q̄ſ

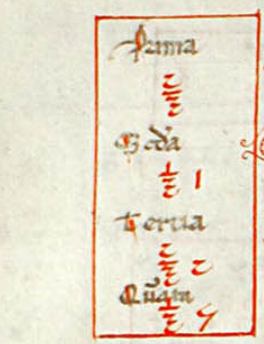


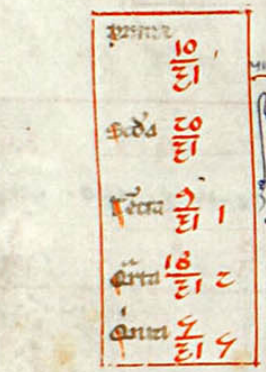


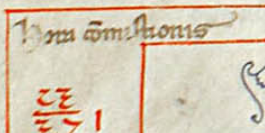












[illegible] $\frac{6}{7}$ 2 [illegible] $\frac{2}{7}$ 1 [illegible] $\frac{6}{7}$ 2 [illegible] $\frac{5}{7}$ 4 [illegible] 10 [illegible]

[illegible] 10 [illegible] **De eodem in iiii^or partes.**

[illegible]

Prima	$\frac{2}{2}$
Secunda	$\frac{1}{2}$ 1
Tertia	$\frac{2}{2}$ 2
Quarta	$\frac{4}{2}$ 4

[illegible] 10 [illegible] **De eodem in quinq;**

[illegible]

Prima	$\frac{10}{21}$
Secunda	$\frac{20}{21}$
Tertia	$\frac{9}{21}$ 1
Quarta	$\frac{18}{21}$ 2
Quinta	$\frac{5}{21}$ 4

[illegible] **De leone et leopardo et urso.**

[illegible]

Hora commissionis	$\frac{22}{27}$ 1

[illegible] **De duabus formicis quarum una iniuriatur.** [illegible]

De duab; nauib; sefe ī uic' q̄ uigēti

De q̄q̄ot tna q̄ bt

De eode tna cū sic' ꝑtam sit

De bure q̄ bt iiii fot unū ft als

a fundo foraminis usq; ad se inuicem diebz. Item si aperiens q̃rtum euacuat ꝺ bucce alia quãta pars in diebz ℔ Queritur si oia quattuor foramina pariter aperta fuerint. in q̃rtum tota bucca euacuabit. Quia euacuato aliquo ipsorum nullum uacuum. aliud plus posse ponere. Necessarium est ut euacuationem unius alicuius foraminis singulariter inquiramus. Primum quidem ponamus q̃ bucca teneat barriles q̃tuordecim ut dicamus ℔ 8 Quorum quãta pars accepta q̃ est hoc per terminum unius alicuius foraminis. Dum accedamus ad euacuationem primi id est superioris foraminis ponimus ut inde oia ℔ illa foramina euacuet de bucce usq; ad superiorem foramen una die. s. horas it Dum uidemus q̃d barriles illius horas primum quod foramen euacuauerit. Et primum quod euacuauerit barriles it mill' horas it Ideo quia ponitur in posito q̃d ipsum euacuat quartam partem totius bucce in una die. Et quia ponitur alia quãta pars in duobz diebz euacuat. Ergo milliis it horas euacuauerit primum barriles 6 cetera uero foramina euacuabit barriles ℔ mill' it horas. Et primum euacuauerit barriles z Iuncta unaquaq; barrilibz it 76 ℔ 72 facit z 4 tot barriles euacuauerit prima quattuor foramina milliis it horas. Quare milliis it pro it facit it ℔ quod duplicatum pro z 4 exibit horae 1/4 4 4 4 quotiens horas euacuabuntur bucca usq; ad superiorem foramen. Dum accedamus ad euacuationem secundi. quãte. 4 pone positum ut euacuauerit ipsa filia mille it horas. Inquirendum. primum euacuauerit barriles 6 primum quidem barriles ℔ pquãtum uno barriles z Quare prima foramina euacuant barriles it pquibz milliab it pro 4 diuido pro z exibit horae 1/2 11 primi secundi. Dum pone ut ista quãta euacuet in horas it inquibz primum foramen euacuat barriles ℔ pquãtum z hoc primum quodlibet euacuant barriles 7 Quare milliab it mille pro it 4 diuidatur pro 7 exibit horae 1/7 10 primi euacuationis fiat quater. primum quattuor foramen. euacuat reliqua quãta in quattuor diebz. Quare dies ℔ 4 horas 1/4 4 4 horas 1/2 11 nec in 4 horas 1/7 10 est dies 7 4 horas 1/4 4 7 1/2 1 et tantum euacuabitur bucca illa. Aliter de bucce

Si dicens q̃ primum quodlibet foramen tota bucca euacuet usq; ad se ipsum in ipsius diebz. pone filium ut bucca teneat barriles ℔ 8 Dum uidemus quodlibet primum euacuabit bucca usq; ad primum foramen. Ipsa uidelicet octo foraminibz. Pone q̃ ut euacuet horas it in quibz primum euacuat barriles it primum uero totidem euacuat. ei in duobz diebz barriles z ℔ euacuet in horas it primum q̃ in positis horis it euacuauerit alios barriles it ei in mille diebz primum euacuauerit barriles z 6 primum ei illius it horas alios barriles it euacuauerit. quibz numeris ei barrilibz euacuationum ei reliquorum foraminum ei ℔ 8 q̃uelibet ei it Ergo milliab it pro it 4 diuido pro ℔ 8 exibit horae z 4 unicum euacuat usq; ad primum foramen. Item si positus secundus euacuatione se quarte alias horas it reperies q̃ primum foramina euacuabuntur barriles z 6 q̃r milliab it pro it 4 diuido pro z 6 exibit horae ℔ 4 milliab euacuabit. Sic quarti Item si positus horas it primum euacuatione sui quarti reperies q̃ primum uero foramen euacuauerit barriles ℔ Quare milliab it pro it 4 diuido pro z ℔ exibit horae 6 primum quarti euacu

Horae euacuat primum
℔ z 4 4 4
Secundi.
1/2 11
Tertii
℔ 20
Euacuatio totius bucce
℔ 0 z 4
4 4 7 1/2 1

Dies et hor ℔ 0 z 4 1
4 4 7 1/2

Euacuatio primi foraminis
horae
z
horae
Secundi ℔
horae
Tertii 6
Quarti horae
12

ntiē. Dq̄ūato foramīe nil diēcdū ē cū manifestū sit q̄ p̄ipm̄ ī hoc ꝯ euacu
ē totū residuū. s. bullę ꝯ Qr̄ ardal boral euacuationū q̄tuor dictoꝝ q̄rtę
s. ꝯ 7 ꝯ 76 7 ꝯ ē hore ꝯ 4 7 mēy euacuabīt bucas illa. Aliō debute
Et ponat q̄ a sūmo bucal usq; ad supl̄ foramē sit ½ totū tem̄ mū bucas.
ab ipō foramīe usq; ad fm̄ sit ¼ ē dē tem̄ mtu. Et ab ipō usq; ad ēmū sit ¼
Ab ipō usq; ad mferiꝰ foramē sit residuū tem̄ mtu bucal 7 p supl̄ foramē eua
uabīt bucal usq; ad ipm̄ m 1 die. p sedm̄ ab ipō supiꝰ usq; ad ipm̄ fm̄ ī ꝯ
p ēmū a sedo usq; ad ipm̄ ēmū in ꝯ p mferiꝰ euacuabīt bucal a ēmo usq; ad ipm̄
in dies ꝯ Pōt ut bucal teneat bullā 60 qr̄ usq; ad supl̄ foramē sē bullę ꝯ s.
ēmū d 60 Et a so for̄. usq; ad supl̄ ꝯ bullę 14 s. q̄rtā d 60 Et a ēmo usq; ad fm̄
sē bullę ꝯ s. q̄ntā d 60 Quilz bullę ꝯ 7 14 ꝯ ī unū q̄libz reddīt ba ꝯ 7
p tem̄ mto bucal. usq; ad ēmū for̄. a q̄bz ꝯ 7 usq; ī 60 sē baꝰ ꝯ ab mferiori for̄
usq; ad ēmū d m̄ pōt die 1 in euacuatōe bucas usq; ad supl̄ foramē ī q̄ positō
die p̄mū for̄ euacuat ba ꝯ p fm ½ 7 s. ½ d 14 p ēmū ꝯ s. ēmū d ꝯ p q̄rtū ¼ ꝯ s.
q̄rtā d ꝯ ꝯ p q̄tuor for̄ euacuāt m 1 die ba ꝯ 7 ꝯ 7 ꝯ ꝯ ē mīma
ba ꝯ ꝯ q̄uellēt ē ꝯ s. tem̄ mtū supiorꝫ for̄. q̄r mltō die 1 plus ꝯ 9 duodes
p ꝯ ꝯ erit 80/120 unī die. p euacuatōe supl̄ foramīs. Jtē pōt unū die ī eua
uatōe ba 14 fi for̄ ī q̄ p fm euacuāt ut p̄dcm̄ ba ½ 7 p ēmū ꝯ p mferi ¼ ꝯ ē
ē mīma ꝯ ꝯ q̄uellēt ē 14 q̄r mltō 1 p 14 9 duodes p ꝯ ꝯ erit dies 1/40 1
p euacuatōe baꝰ 14 Rursū pōt unū die ī euacuatōe barulū ꝯ ēmū for̄ in q̄ die
p̄ipm̄ foramē euacuāt baꝰ ꝯ p mferi ¼ ꝯ ē putūp ꝯ 7 q̄uellēt ē ꝯ q̄r mltō
1 p ꝯ 9 duodp ꝯ 7 erit dies 10/20 1 p euacuatōe ēmū for̄. p mferi no foramē
euacuat residuū in dies ꝯ ut p̄positū ē. Qr̄ ardes dies ꝯ 7 10/20 1 7 1/40 1 7 80/120
habilēb dies 7 horal 24/20 4/40 1224/1200 ꝯ p euacuatōe totū bucal. Quod ali debuit
Et hp unū q̄q; foramē usq; ad ipm̄ totā bucē euacuari ponat ī spōnis diebz.
pōs sūt ut bucal teneat bullas 60 qr̄ p p̄mū euacuāt baꝰ ꝯ ī uno die. p fm
ꝯ 7 14 s. ꝯ 9 in duobz diebz. p ēmū ꝯ 7 14 7 ꝯ s ꝯ 7 in duobz ꝯ p mferi eua
uāt ba. 60 s. totū bucal ī diebz ꝯ Qr̄ pōs ī euacuatōe ba ꝯ supiorꝫ for̄
die 1 Jnq̄ p p̄mū euacuāt baꝰ ꝯ p fm ½ 17 s. dimidiū d ꝯ 9 p ēmū ꝯ 14 s. ¼
d ꝯ 7 p mferi 14 s. q̄rtā d 60 7 sic ꝯ in sūma ba 1/6 68 q̄uellēt ē ꝯ q̄r mltō 1
p ꝯ 9 duod p 1/6 68 erit 120/1700 unī die. Jtē p euacuatōe ba 14 fi for̄ pōt die 1 inq̄
p fm euacuāt ba 1/2 17 p ēmū ½ 14 p q̄rtū 14 ē ē mīma ba. 1/6 68 q̄uellēt ē 14
q̄r mltō 1 p 14 9 duod p 1/6 68 erit 20/85 unī die. Rursū p euacuatōe ba 12 ēmū
for̄. pōt die 1 ī q̄ p̄ipm̄ euacuāt baꝰ 2/2 14 pulmū 14 ē putūp ꝯ 2/2 ꝯ q̄uellēt
ē 12 q̄r mltō 1 p 12 9 duod p ꝯ ꝯ erit 2/2 unī die. Jtē pōt ī euacuatōe ba.
12 mltōz for. die 1 inq̄ euacuāt ba 14 q̄uellēt ē 12 q̄r mltō 1 p 12 9 duod p 14
erit 12/14 unī die. q̄bz unctis cū 2/2 9 cū 12/1700 redditur p sūma die 1 9 horaꝝ
1 12 16 12 11 4 10
2 17 17 2 2 4 0 1 2 1 p euacuatōe totaꝫ bucaꝫ.
Cū ē bucas. bīl mferi sua. 10 q̄ p p̄mū euacuāt ī 1 die. p fm m ½ unī die.

Euacuatio supioris
80/120 unū die
Sedi
1/40 1
Tertii
120/200 1
Quārti
4
Summa
die 9 horal 24/20 4/40 1224/1200 ꝯ

Euacuatio primi
120/1700 dies
Sedi
20/285
Tertii
2/22
Infioris
12/14
Sūma horal
1 12 16 12 11 4 10 dies
4 17 17 2 2 4 0 1 2 1

Quaquat bucas
dies unius
1/44

Caricam nauis
10/13 p 2 10

Caricam nauis
23/61 1 2 11

De quatuor hominibus nauem locantibus

De eodem

De homine retento tobsequio

primus
23/13 2
secundus
23/13 4
Tertius
23/13 7

60 p 8/14 1 er 92 q diuid p 29 exibit 5/29 3 p q̄ntitate p̄mi nūi q̄bz addit 2 habet 5/29 4 p sedo nūo q̄bz itm̄ addit 2 habet 5/29 7 p tertio nūo. **De nūo cui sr̄ addit**

Est nūs sr̄ que si addidis 1/4 1/3 et 12 et de collecta q̄ntitate 1/4 1/3 et 12 et a quo exhibit 1/6 2/4 abstulerit 1/6 2/4 et 12 nichil remanebit. Queritur quid sit nūs ille. Primo et 12 et nil remanet

Quantitas q̄ sit nūs de quo si extraxeris 1/6 2/4 et 12 nichil remaneat. Pro quo pone 40 de q̄bz extrahe 1/6 2/4 s. 17 remanet 13 que cū uelit esse 12 multa 12 p 40 er 360 q diuid p 13 exibit 9/13 27 p q̄bz itm̄ dicos. Est nūs sr̄ que si addidis 1/4 1/3 et 12 facient 9/13 27 q̄ extrahe 12 de 9/13 27 remanebit 9/13 15 de in pone ut ipse nūs sit 12 sr̄ que adde 1/4 1/3 ipsi er 19 q cū uelit esse 9/13 15 multa itaq 12 p 9/13 15 et diuides p 19 exibit 4/13 17/19 9 et tot erit nūs ille. Ubi gratia. Accipe 1/4 1/3 de 4/13 17/19 9 q̄s sic accipe eas demonstrauimus uidelicet ut multos 9 p 19 et adde 17 q p 13 et adde 4 er 2448 sr̄ q adde 1/4 1/3 ipsorum q̄s 1428 er 3876 q diuid p 1/19 0/13 Et ideo primus p 19 quam p 13 quia 3876 integraliter diuidatur p 19 exibit 9/13 15 sup q adde 12 er 9/13 27 de q̄bz extrahe 1/6 2/4 q̄s 9/13 15 remanet 12 q̄ si abiecerit nichil remanebit ut p̄positum est. **De nūo cui sup addit 1/9 3/7 et 60.**

Item est nūs sr̄ que si addideris 1/9 3/7 et dicos 60 et de collecta summa extraxeris 1/8 1/4 1/3 et dicos 60 nichil remanebit inuenies nūm. de q̄ extrahe 1/8 1/4 1/3 remanent 60 erit nūs ille 24/41 174 de q̄bz extrahe 60 remanet 24/41 114 p q̄bz inuenimus est nūs sup que si addatur 1/9 3/7 faciat 24/41 114 que sic inuenies. Ideo q̄ ut ipse sit 63 de q̄bz accipe 3/7 q̄s 27 sic 1/9 q̄ 7 er 34 et adde cū 63 er 97 q uellet esse 24/41 114 Unde multiplicanda 63 p 24/41 114 et diuidenda p 97 exibit 17/41 8/97 74 p quesiti nūi quantitate. **Item alia cum similis**

Item est nūs sr̄ que si addideris 4/9 3/7 2/4 ipsi nūi et i sr̄ alios duos nūos equales q̄ scilicet uoluerit et 1/4 1/3 unius ipsorum nūorum et de collecta q̄ntitate extraxeris 3/11 2/9 2/7 et tres nūos tales quales fuerint ipsi duo quos primum inuenies et 1/9 1/4 unius ipsorum nūorum nichil remanebit. Primum quidem inuenies q̄s nūi illi q debet addi in principio et extrahi in fine q̄s sic inuenies uidebis q̄s sic nūs in q̄ reperiantur 1/4 1/3 et 1/9 1/4 q nūs 45 et tot pone p nūo illo. Et quia p̄ponitur in fine de extrahendis tribus nūs illis et 1/9 1/4 unius illorum multa 45 p 3 er 134 sr̄ q adde 1/9 1/4 de 45 s. 14 er 149 de in minimas p regulam sui arboris q̄s sit nūs de q̄ extrahis 3/11 2/9 2/7 remanent 149 q̄ si sit p̄ consideratione ipsi arboris regulo inuenire sciuis. ipsum est 1/8 6/19 679 inuenies de q̄bz extrahe duplum de 45 et nūs 1/4 1/3 de 45 hec 114 remanebit 1/8 6/19 565 p q̄bz inde p regulas sui arboris. quare est nūs sup que si addideris 4/9 3/7 2/4 et fiat 1/8 6/19 164 erit nūs ille 3/4 4/8 2/19 27/179 248 et sic omnes regulas huiusmodi operabis. **Questio p̄posita a q̄dam constantinopolitano mag 1/9 1/3**

Summe 1/9 1/3 unius nūi et extrahe 1/9 1/3 et q remanet diuide in duas tales partes ut multos una partem p 1/7 1/2 et alia p 4/9 1/2 et fiat equales. Sic facies pone nūm tale quod de 1/9 1/3 ipsi possis 1/9 1/3 integraliter extrahere erit nūs ille 81 de quo accipe 1/9 1/3 s. 36 et extrahe 1/9 1/3 s. 16 remanebit 20 q oportet diuidere in duas tales partes q multiplicata una illorum p 4/9 1/2 faciat tantum q̄ntum multiplicata alia p 1/7 1/2 Et ut hac potest arborum regula inuenire pone q una partium sit 18 q multiplicata p 4/9 1/2 faciunt 17 de in uidere p regula primi secundi arboris q̄s est nūs de q 17 sit 1/7 1/2 erit nūs ille 4/9 26 q adde cū 18 er 4/9 44

Numerus
4/13 17/19 9

Numerus
17/41 8/97 74

Numerus
3/4 4/8 2/19 27/179 248

pars prima
1/10 8
secunda
9/10 11

numer
81

q̄ nūl uellet cē 20 olīb ḡ 18 p 20 7 duūdes p 5/12 ecabt 1/10 8 p q̄ntitate unū p̄ūs aqbz usq; in 20 dūnt 2/10 11 q̄ fuit alia pars. De cuppa aut fundo ē tra pars tot

Vendī cuppa ē d q̄ fundo pōdēt tra tot cuppe. cupelū cuppe Cuperuū ē quarta uo pōdēt q̄rtū residuū uo pōdēt libras 14 q̄rt pōdus tot cuppe. q̄ pōitus filiz ē arbozis d q̄ 1/2 1/2 latet sub tra. 7 sr tm ē palm 14 Vbi gīa. ai fundo cuppe sit 1/2 7 cupelū sit 1/4 tot cuppe. Ergo mē fundū 7 cupelū 3/4 1/2 tot cuppe. Et b q; remanet pondēt libē 14 Qr ai d q̄ntitate tot cuppe q̄rt. ponēdū ē fm cdē arboris regulā ut ip̄ū pondēt aliq̄ mūm talē uidelicz ut ip̄o repiant minuta pōdīoīs. s. 1/4 1/2 q̄ nūl erit 12 Qr pōe ut cuppa pōdēt libē 12 q̄ ipē fundo ai sit tra cuppa pōdēt libē 4 7 cupelū ai sit 1/4 pōdēt libē 2 Ergo mē fundo 7 cupelo pōdēt lē 7 aqbz usq; in 12 dūt libē 4 p q̄ntitate residui cuppe q̄ uellēt ee lē 14 q̄ ai nō fuē. olīb 12 p 14 7 duūdes p 4 7 sic puenuīt 2 6 p pōdē tot cuppe.

Fundus cuppe 2 6

Am si dicat q; fundo pōdēt 1/2 tōy medu 7 cupelū. Eo cupelū pondēt 14 Alīt d cuppa quātū medu 7 fūdi. medui uo pondēt 14 qua pōtuōm si ad regulam cdē arboris reducē uoluīs. sic facies ai fundo pōdēt 1/2 medu. 7 cupelū. Et si mē cupelum 7 meduū pōdāt 2 fundo pōdāt 1 ḡ fundo ē 1/2 tot cuppe. Eadēq; ratōe ai cupelū ē 1/4 medu 7 fūdi. si mē meduū 7 fundū pōdant 4 cupelū pondāt 1 ḡ cupelū ē 1/4 tot cuppe. 7 tm mē fundī 7 cupelū sūt 1/4 1/4 tot cuppe. qr inuenienda ē ratō d quo repiāt 1/4 1/4 entiq; 20 q̄ erunt exmlāde d 4 7 d q̄bz extrahat 1/4 1/4 sibi remanēt 11 Qr mlā 20 p 14 er 200 q̄ duūs p 11 ecabt 2/11 27 p pondē tot cuppe.

Cuppa 2/11 27
fundus 7/11 6
cupelū. 2/11 7

Vīm si mlā quāq; q̄nq; pānū reperire uoluīs ai fundo sit 1/2 tot cuppe. Sume 1/2 d 20 q. ē 4 q̄ mlā p 14 er 7 4 q̄ duūs p 11 ecabt p pondē fundi libē 6/11

Jtē ai cupelū sit 1/4 tot cuppe. Adē 1/4 d 20 q̄ ē 4 q̄ mlā p 14 er 60 q̄ duūs p 11 eabunt p pondē cupelu libre 5/11 4 Item de cuppa

Item ē cuppa ai fundo ē 1/2 1/2 cupelu. 7 medu. Cupelū uo ē 1/6 1/4 medu 7 fundi. Meduī cuppe pondēt libē 6 Querit pondo fundi 7 cupelu. q; fundo ē 1/2 1/2 residui. ḡ si residui pōdēt lē 12 7 fundo pōdēt lē 7 ḡ tota cuppa pōdēt libē 19 qr fundo pōdēt 7/19 tot cuppe. p eandē rōem. cupelū ai sit residui 1/6 1/4 ei 11/24 tot cuppe. vī dēre ī ordinē 11/24 7/19 7 nūb 7 q̄ libē 19 p 24 er 287 Jtē mlab 11 q̄ libē 24 p 19 er 209 q̄ abde ai 287 er 96 7 nūb 19 p 24 er 779 d q̄bz extrahe 96 remanēt 683 mlā 779 p 6 er 4674 cū duūs p 683 ecabt 1476/683 16 p q̄ntitate pōdis tot cuppe. 7 si mlā uis 287 p 6 7 duūs p 287 repies 276/683 6 p q̄ntitate fundi. Jtem si mlā uis 209 p 6 7 duūs p 287 repies laſ 1272/683 4 p pondē cupelu.

1476/683 16
276/683 6
1272/683 4

De uū bōb: dē hūbus

Quattuor boies hūt oēs. dīt ai p̄mus erāt 1/2 1/3 oīm aliorū tī. 2us ai sol erāt 1/3 1/4 aliorū tī. 3ius ai erāt 1/8 1/7 aliorū tī. 4tus ai quātū erāt 2 Querit q̄t oēs mō q̄lq; reliquos habeat. h q̄stio eandē retinet regulā cuppe sit. q ai dīt primi boīs sit 1/2 1/3 oīm. Aliq̄ tī boīm. ḡ hēt ipe 7/19 tot sūme oīm q̄ttuor. Jpē eandē. 7 sedz hēt 11/24 eidē sūme. Et ai tī haberet 1/8 1/7 reliquos

g̃ si ip̃i ures hñt dn̄os 46 7 ipe hñt 1/8 1/7 ullor. hẽ 14 g̃ mñ eḡ hñt dn̄os 71 dq̄bz
ipe hñt 15/71 g̃ assumat̃ h̃ q̃stio arboꝛ ut nũo. d quo excūl 15/71 11/71 7/19 rema
nẽt 27 q̃ sic fiat̃. mt̄a 7 q̃ sr̃ 19 p 1 q̃p 71 es̃ 2077 q̃ pẽ sr̃ 7/19 Jũm mt̄a
11 q̃3 sr̃ 1 p 71 q̃p 19 es̃ 1484 q̃ pẽ sr̃ 11/70 rurs̃ mt̄a 14 q̃3 sr̃ 71 p 1 q̃
p 19 es̃ 11684 q̃ pẽ sr̃ 15/71 Accde tmq̃ 2077 aũ 1484 7 aũ 11684 es̃ 6901
q̃ excūbe exmt̄cẽ d 19 m 1 q̃m 71 s. d 4477 remanebũ 81 8 q̃bz repiet.
regulã q̃ 1/8 0/1041 Et mt̄a 2077 p 27 es̃ 4491 q̃ duuꝰ p 1/8 0/1041 exabũt dũ
7/8 1577/1041 669 tot hũt p̃m̃ hõ. Jt̃ mt̄a 1484 p 27 es̃ 400647 q̃ duuꝰ p 1/8 0/1471
exabũt dũ 5/8 684/1041 147 7 tot hũt sc̃dꝰ. Jt̃ mt̄a 11684 p 27 es̃ 31491 q̃ duuꝰ p
1/8 0/1041 exabũt dũ 7/8 6477/1041 327 7 tot hũt tm̄ul. aliq̃ quãtit̃ q̃ ꝓpoit excedẽ eũ i aliq̃ ꝓpoõe.

Primus
2/8 1577/1041 669

Secundus
2/8 684/1041 147

Tertius
7/8 6477/1041 327

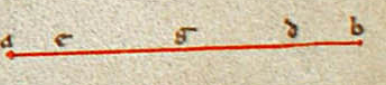
Opo hoiel dũos hñt. quoꝝũ unus De duobꝫ hoibꝫ q hñt dr̄ exq̄bz unꝰ pet̃ alt̃
dr̄ alt̃. Si dr̄z m̃ unũ excūl dũl. eẽm e eq̄l. alt̃ respondt. 7 si tu dr̄z o
unũ excūl dũl. hẽm decies tm̄ q̃a tu. Quer̃ q̃r unꝰ q̃q̄z hẽat. Qd ut ad
regulã arboꝝ reducat̃. sic undẽ. q̃ p̃m̃ hit uno. ex dũl altũs ꝓpoit se
q̃ẽ equalẽ. g̃ medietat̃ totꝰ sũme dn̄oꝝ ãborũ cui hĩc. hit ipe 1 dn̄o nõ
dubitat̃. Qr̃ obedel 1/2 Jt̃ q̃ alt̃ hit 1 ex dũl p̃mꝰ. decies tm̄ q̃m ipe se hĩc
prumat. g̃ si ipe tũc biut 10 7 p̃m̃ habuit 1 g̃ mẽ ãboꝝ hĩent 11 ex quibz
aũ sc̃dꝰ habeat 10 minutũ d tota sũma utũq; ipm hĩc 10/11 affirmat̃. Ergo
unꝰ hñt 1/2 totꝰ sũme. valẽ 10/11 hit uidel̃ q̃ hit dn̄o. Qr̃ ducẽs e arbor aũ 1/2 7 10/11
supar longitudĩe arboꝝ palmꝝ uidel̃ illuꝰ quoꝝ ipi adminicr̃ quer̃. sc̃dꝰ
illi arboꝝ regulã oportet mt̄are 1 q̃ẽ sr̃ p 11, er 11, 710 q̃s sr̃ 11 p 2 es̃ 2 q̃ ad
de aũ 11 es̃ 21 7 p 11 fiaũt 22 q̃ excūbe d 21 remanẽt 9 q̃uellẽt eẽ 2 quare
mt̄a 2 s. iunctiõm utũq; dũl p 11 es̃ 22 q̃ duuꝰ p 9 exabũt 5/9 2 7 tot hũt
primꝰ. accepto dn̄o ab altõ hoie. Ergo p̃m̃ hñt dũi 5/9 1 Jterũ mt̄ai eadẽ 2 p
20 es̃ 40 q̃ duuꝰ p 9 exabũt dũ 5/9 4 7 tot hũt alt̃ hit dn̄o ab alio. g̃ hũt
ipe dn̄os 5/9 2

Primus
5/9 1

Secundus
5/9 2

De eadem re

Aliẽ fm quoꝝũdã muẽtiõm. Cui sc̃dꝰ hit 1 ex dũl p̃mꝰ. ꝓponit se hĩc decies
tm̄. p̃mo. excūbe 1 d 10 remanẽt 9 unꝰ hñt 5/9 1 valẽ 5/9 2 7 sic duces q̃ ipe hĩet
duodecies tm̄ p̃mꝰ. Sili excūbes 1 d 12 remanẽt 11 7 sic unꝰ hñt 5/11 1 7 valẽ 5/11 2
Et sic posses facẽ d qualibet sili mirogatẽ. Questio d eadẽ re nob̃ q̃ap̃ posita
Tem sipponat̃ q̃d unus illoꝝ petat tuo pulo aquodam magiõ proposita
alii dr̄ 7 habeat q̃nuplũ el. Et sc̃dꝰ petat primo 4 dn̄oꝝ. 7 hĩat septuplũ eius
de solutio huiꝰ q̃onis reducẽdꝰ ad regulã sic arboꝝ 7 ad oculũ clarẽ uidẽ
sit sũma dn̄oꝝ ipoꝝ linea. a. b. exq̄. a. g. sit primo p̃mꝰ. q̃. g. b. eãt primo sc̃di
7 signẽt in. g. b. puncẽ. d. situꝫ. g. d. 7 7 i. a. g. signẽt punc̃. e. situꝫ. e. g. 7
Et q̃m p̃m̃ petat 6 septẽ. s. nũm. g. d. 7 primo el ẽ nũl. a. g. si addat̃ ei ipe 7
hĩbit nũm. a. d. q̃ quoniã ẽ q̃nuplũ reliqui dn̄oꝝ. sc̃di hoĩs. s. excūbo. d. b. 7
simul. a. d. duplicẽt̃ manẽtq; puncꝰ eq̄les eãt una q̃q; pars equal̃ huiꝰ. d. b. q̃.
d. b. ẽ septima pars totꝰ nul. a. b. s. d sũma dn̄oꝝ utũq; hoĩs. Rursus si ip̃i dn̄os



De eodem sdm regulam rectam

[illegible] $\frac{0}{\text{[illegible]}}$ $\frac{\text{[illegible]}}{\text{[illegible]}}$ 1 [illegible] $\frac{\text{[illegible]}}{\text{[illegible]}}$ [illegible] 4 [illegible] $\frac{\text{[illegible]}}{\text{[illegible]}}$ 4 [illegible]

[illegible] 7 [illegible] **Modus alius de duobus hominibus**

[illegible] 4 [illegible] 1 [illegible]

[illegible] 7 [illegible] 6 [illegible]

[illegible] 6 [illegible] minoris summe [illegible]

[illegible] $\frac{4}{6}$ [illegible] 6 [illegible] $\frac{1}{6}$ [illegible]

[illegible] 7 [illegible] $\frac{7}{8}$ [illegible]

[illegible] 4 [illegible] 4 [illegible] $\frac{1}{8}$ [illegible] 6 [illegible] $\frac{4}{6}$

[illegible] minoris summe. [illegible] $\frac{7}{8}$ $\frac{4}{6}$ minoris summe [illegible] 6 [illegible]

[illegible] 10 [illegible] $\frac{7}{8}$ $\frac{4}{6}$ minoris summe [illegible] 10 [illegible]

summa. [illegible] 1 [illegible] $\frac{7}{8}$ $\frac{4}{6}$ [illegible]

[illegible] 10 [illegible] $\frac{7}{8}$ $\frac{4}{6}$ [illegible] 11 [illegible]

minor summa [illegible] 1 [illegible] 11 [illegible] $\frac{7}{8}$ $\frac{4}{6}$ [illegible]

[illegible] $\frac{7}{8}$ $\frac{4}{6}$ [illegible] 11 [illegible] 24

[illegible] $\frac{7}{8}$ $\frac{4}{6}$ [illegible] 24 [illegible] 17 [illegible] 17 [illegible] 11 [illegible]

$\frac{4}{6}$ [illegible] 24 [illegible] 20 [illegible] 11 [illegible] 17 [illegible] $\frac{4}{6}$ minoris summe $\frac{16}{17}$ 12 [illegible] 6 [illegible]

[illegible] $\frac{4}{6}$ minoris summe remanent $\frac{16}{17}$ 6 [illegible] $\frac{7}{8}$ [illegible] 24 [illegible]

[illegible] 11 [illegible] 17 [illegible] $\frac{10}{17}$ 12 [illegible] $\frac{7}{8}$ minoris summe [illegible] 4 [illegible]

[illegible] $\frac{7}{8}$ remanebit $\frac{10}{17}$ 7 [illegible] **De eodem**

[illegible] $\frac{1}{8}$ minoris summe [illegible] 4 [illegible] 7 [illegible]

$\frac{1}{6}$ [illegible] $\frac{1}{8}$ $\frac{1}{6}$ minoris summe [illegible] 12 [illegible] maior summa [illegible]

$\frac{1}{8}$ $\frac{1}{6}$ minoris summe [illegible] 11 [illegible] $\frac{1}{8}$ $\frac{1}{6}$ minoris summe [illegible] 11

[illegible] minorem summa [illegible] $\frac{1}{8}$ $\frac{1}{6}$ minoris summe [illegible] 11 [illegible]

[illegible] summa [illegible] 24 [illegible] $\frac{1}{8}$ $\frac{1}{6}$ remanent 17 [illegible] 11 [illegible] $\frac{1}{8}$ [illegible] 24 [illegible]

[illegible] 11 [illegible] 17 [illegible] $\frac{6}{17}$ 1 [illegible] $\frac{1}{8}$ minoris summe [illegible] 24 [illegible] 11 [illegible]

[illegible] 17 [illegible] minoris summe [illegible] $\frac{16}{17}$ 1 [illegible] 4 [illegible]

[illegible] $\frac{16}{17}$ 6 [illegible] ut [illegible]

[illegible] $\frac{1}{8}$ [illegible] 24 [illegible] 11 [illegible] 17 [illegible] 7 [illegible] $\frac{16}{17}$ 7 [illegible] **De eodem**

[illegible] $\frac{4}{6}$ minoris summe [illegible] 6 [illegible] $\frac{1}{8}$ [illegible] summe [illegible]

[illegible] 4 [illegible] $\frac{4}{6}$ minoris summe [illegible] 6 [illegible] $\frac{1}{8}$ [illegible] summe [illegible] 4 [illegible]

[illegible] 6 [illegible] $\frac{4}{6}$ minoris summe [illegible] $\frac{1}{8}$ [illegible] summe [illegible] 11 [illegible] $\frac{1}{8}$ [illegible]

$\frac{4}{6}$ minoris summe remanent 11 [illegible] 24 [illegible] $\frac{4}{6}$ [illegible] 24 [illegible]

$\frac{1}{8}$ [illegible] remanent 17 [illegible] 11 [illegible] $\frac{4}{6}$ [illegible] 24 [illegible] 20 [illegible] 11 [illegible] 17 [illegible]

[illegible] 6 [illegible] $\frac{1}{8}$ [illegible] 24 [illegible] 11 [illegible] 17 [illegible] 4 [illegible]

$\frac{7}{8}$ minoris summe [illegible] 4 [illegible] 7 [illegible] $\frac{1}{6}$ [illegible] summe [illegible]

[illegible] 4 [illegible] $\frac{7}{8}$ minoris summe [illegible] 11 [illegible] $\frac{1}{6}$ [illegible] summe. [illegible] $\frac{1}{6}$ [illegible] $\frac{7}{8}$ minoris summe.

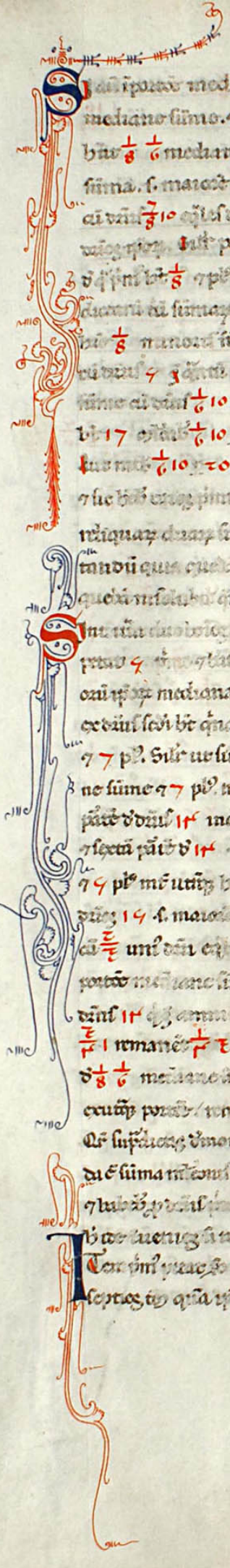
remanēt ‖ pōt silr ut ipa sūma sit ꝛ ꝺ aūl 7/8 ·s.ꝺ ꝛ excta 1/6 ·s. ꝛ remanēt ‖ q̄ uelūb ē ‖ aut mlā ꝛ ꝑ ‖ 7 ꝺuūdes ꝑ ‖ 7 ocēbz nū ꝛ q̄ fs bt mnꝰ. aut mlā ꝛ ·s. 1/6 ꝺ ꝛ ꝑ ‖ 7 ꝺuūdes ꝑ ‖ 7 sr addes 7 7 hēb ꝺ fi hoīs · posſūt ē ꝑ ea q̄ ꝺuāmꝰ repma q̄ oēsimulbz q̄ōbz ſolubiles ꝯ. 7 q̄ mſolubiles / ſm ꝑdicta mlā tantes posſūt ſolui ē unaq; ꝺictoꝝ hoīū eq̄lē supauīt sr ſuā mlāntē ab uno ꝑdicto ꝺūo usq; ꝺuos ‖ abūdāl uō supl ipōs ī ſolubiles ē ꝓbabilr. Aūl exēplū ꝓpl petat / ſo ꝺē 7 7 beat ꝛ plusq̄a q̄nq̄es tōy ipō. ſ. ocēs silr q̄uat ꝓmo 4 7 beat septies tōy q̄a ꝓpl. 7 plus ꝺē ꝛ ꝛ ꝺuāmꝰ supl. ꝺūs nāq; ꝯ ipōꝝ uocāt maior sūma. Duodecī uō mnꝰ ea. uocabt mnō. aī ꝛ sr habūdet unaq;. Et q̄m ꝓpl bīus 7 a ſecō bt q̄nq̄es tōy q̄a ipē 7 insr ꝺuos ꝛ necessarū ē ipm ꝓmū hīe 5/6 minorū sūme. 7 ꝺē ꝛ plꝫ. ecqlz ꝛ aī 7 sūt ecꝺūꝰ fi. remanet portio ꝓma hoīs ꝺ 4 plꝫ ꝺ 5/6 minorū sūme. ſ silr minoꝝ portiōm ſecūꝺ ēē ꝺē 7 plꝫ ꝺ 7/8 minorū sūme. ꝯ mē utiq; bīt 7/8 5/6 minorū sūme. 7 ꝺē ꝛ bīt ecā 7 ipī silr ꝺē ꝛ plꝫ minorū sūme. ꝯ 7/8 5/6 minorū sūme aī ꝺē ꝛ ꝑ q̄tū maior sūma. 7 q̄m aī ꝺ eq̄lbz eq̄lia tollāt. q̄ remanēt eq̄lia ꝯ. ſi abutiꝝ portē tollāt ꝛ remanebīt 7/8 5/6 minorū sūme eq̄les eidē minori sūme. q̄ ē impossibile, ut alit aī fs dat 7 ꝓ. 7 remanet ea 1/6 minorū sūme. ꝯ portio eī ē ꝺē 7 plusq̄a 1/6 minorū sūme. Inuenīt ē supl portōm ipī ēē ꝺē 7 plꝫ ꝺ 7/8 minorū sūme. ꝑ 1/6 minorū sūme aī ꝺē 7 ē / q̄tū 7/8 eidē sūme aī ꝺē 7 sr ē utiq; 7 equales remanet ꝯ 1/6 minorū sūme eq̄l ꝺ 7/8 eidē sūme. qꝺ ē nūm impossibile. Inportē aū ꝓma bonꝫ inuenies 1/8 minorū sūme. ēē eq̄lē ꝺ 5/6 eidē sūme qꝺ ē inuenies. Silr mlā mō uenīēs ostēdēt. ñ posse / supare aliam ipōꝝ ultra ꝺē ꝛ ¶ Modus ter ī q̄ēē duoꝝ hoīū

Rsū ꝓmī q̄uat ſo 7 7 bat ꝛ plꝫ q̄a q̄nq̄es ipō. ſecūꝺ petat ꝓmo 4 7 bat ꝛ plꝫ q̄a septies ipō. Inhac q̄ēē tres sūme ꝯsiꝺēnde sr. Quaꝝ maior ē q̄tutal oīū ꝺuoꝝ ipōꝝ duoꝝ hoīū media ē ꝛ mnꝰ ea. ¶ minor q̄q; ē ꝛ mnꝰ maioꝝ sūme. ut ꝛ mnꝰ media. Et q̄m ꝓmꝰ aī 7 ꝺūs / fi bt q̄nq̄es tōy q̄a fs. 7 ꝛ plꝫ ipm ꝓmū 5/6 mediane sūme mnꝰ ꝺē 6 7 ſm hoīē 1/6 eidē sūme 4 plꝫ ꝺē 7 hīe necesse ē. Silr q; fs aī 4 ꝺūs ꝓmus bt septies tōy q̄m ꝓmꝰ 7 ꝛ plꝫ. excēt / ipī ꝛ ꝺ maioꝝ sūma. remanet mnō sūma ꝺ q̄ fs aī ꝛ excēs ꝓmus bt septies tōy q̄m ꝓmꝰ. b ē 7/8 minorū sūme. mnꝺē ꝛ q̄ ꝓmꝰ bt 1/8 eidē minorū sūme. 7 insr ꝺē 4 plꝫ ipōꝝ. uocēt q̄s dat fo. q̄bz ōibz pac / ſ. posſūt redigi. portiōes utūlq; ī pātes unꝰ cuilibz tū ꝺicta sūma ꝛ. vocēt ꝯ ꝓmū ī pātes minorū sūme. Cūm mediana sūma ē plꝫ ꝛ minori 5/6 mediane sūme ē 5/6 unꝰ ꝺē plꝫ 5/6 minorū sūme. ꝯ 5/6 minorū sūme aī 5/6 unꝰ ꝺūs. ē q̄tū 5/6 mediane sūme. 4 ꝓmꝰ bt 5/6 mediane sūme mnꝰ ꝺē 6 ꝯ bt 5/6 minorū sūme mnꝰ ꝺē 6 4 plꝫ 5/6 unꝰ ꝺūs. Qꝫ excēt 5/6 unꝰ ꝺūs ꝺ 6 remanēt 1/6 4 ꝯ ꝓmꝰ bt 5/6 minorū sūme mnꝰ ꝺē 1/6 4 ꝺ q̄ ſecūs bt ut muētū ē 7/8 minus ꝺē ꝛ q̄ mē utiq; bīt 7/8 5/6 eidē minorū sūme minus ꝺē 1/6 8

Habēt q̄ 4 ipī maioꝝ sūma. ſ. ꝛ plꝫ minorū sūme. Vñ manifestū ē q 7/8 5/6 minorū sūme mnꝰ ꝺūs 1/6 8 ſ. q̄tul mnō sūma aī ꝺē ꝛ Qꝫ excēs ipīs ꝛ ꝺ utiq; portiē. remanet mnō sūme eq̄l ꝺ 7/8 5/6 ipī mnꝺē 1/6 10 q̄r muenīēda ē sūma ꝺ q 7/8 5/6

sit habuerit $\frac{1}{6}$ 10 ipa summa. Deos itaq; ut ipa summa sit $\frac{27}{47}$ au $\frac{7}{8}$ $\frac{5}{6}$ s $\frac{47}{1}$ sit habuit
17 ipa $\frac{47}{1}$ q 17 au uelit ee $\frac{1}{6}$ 10 oll $\frac{1}{6}$ 10 p $\frac{5}{6}$ d $\frac{27}{47}$ s. p 20 7 duudecp 17 erit $\frac{1}{2}$ $\frac{16}{17}$ 11
p $\frac{5}{6}$ minoris summe d qlz excesse $\frac{1}{6}$ 4 qs p'm bt mn' d $\frac{5}{6}$ minoris summe. remanebt
$\frac{27}{47}$ 6 tm bt p'm. Jte m'ca $\frac{1}{6}$ 10 p $\frac{7}{8}$ d $\frac{27}{47}$ s. p 1 7 duudecp 17 7 d' excessu summa
remisse 2 q sol's bt minus d $\frac{7}{8}$ minoris summe erit $\frac{19}{27}$ 3

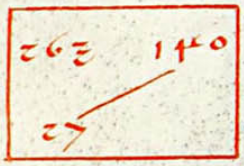
Ee si uis cog reducere i portee summe d q p'm mediane bt $\frac{5}{6}$ mn' di 6 7 sol's ai bent $\frac{7}{8}$
minoris summe mn' di 2 bebit excmediana summa $\frac{7}{8}$ mn' di 2 7 mn' $\frac{7}{8}$ ipi dm q
e me mediana summa 7 minoie. qr ai minor summa sit 1 mn' mediana $\frac{7}{8}$ minoris s
$\frac{7}{8}$ un' di mn' d $\frac{7}{8}$ mediane. g' ai p'm bnt $\frac{5}{6}$ mediane summe mn' 6 7 s $\frac{7}{8}$ eide mn'
di $\frac{7}{2}$ 2 me utiq habebit $\frac{7}{8}$ $\frac{5}{6}$ eide mediane summe mn' di $\frac{7}{8}$ 3 7 qm ipi bnt 1 plus
mediane summe. s. maioie summa $\frac{7}{8}$ $\frac{5}{6}$ mediane summe mn' di $\frac{7}{8}$ 3 st q'ntu media
na summa ai di 1 q dno excesso excessus portee remanet mediana summa cui' de $\frac{7}{8}$ $\frac{5}{6}$
ipi mn' dnt $\frac{7}{8}$ 10 Quare m'cauda g $\frac{7}{8}$ 10 p 20 7 duudeda p 17 7 d' summa excessu eda
6 q p'm bt mn' d $\frac{5}{6}$ mediane summe. 7 beb di p'm $\frac{27}{47}$ 6 sili' m'cauda q tm $\frac{5}{6}$ 10 p
2 1 7 duudeda p 17 7 excessu eda $\frac{7}{8}$ 2 7 beb di $\frac{19}{27}$ 3 Rursus aliter reduces dnos eorum i
portionem maioris summe qr p'm bt $\frac{5}{6}$ mediane summe mn' di 6 beb utiq $\frac{5}{6}$ maio
ris summe mn' 6 7 mn' $\frac{5}{6}$ d ipo dno q sit e amediana summa i maioie. g' $\frac{5}{6}$ maioris
summe q $\frac{5}{6}$ uni dni pl's d $\frac{5}{6}$ mediane summe. Qr p'm bt $\frac{5}{6}$ maioris summe mn' di $\frac{5}{6}$ 6
bnt ai sol's bnt $\frac{7}{8}$ minoris summe mn' di 2 beb utiq d maioi summa $\frac{7}{8}$ mn' di 2
7 mn' $\frac{7}{8}$ d dnl 2 tqlz maior summa excedit minoie. na $\frac{7}{8}$ di 2 e $\frac{2}{47}$ 1 g' sol's bt $\frac{7}{8}$
maioris summe mn' di 2 7 $\frac{2}{47}$ 1 b e mn' $\frac{2}{47}$ bt e p'm ut dicemus $\frac{5}{6}$ maioris summe m
n' $\frac{5}{6}$ 6 g' me utiq bnt $\frac{7}{8}$ $\frac{5}{6}$ maioris summe mn' dnl $\frac{5}{6}$ 6 7 $\frac{2}{47}$ s. mn' $\frac{7}{12}$ 11 bnt e 7
ipi maioie summa tm. Qr $\frac{7}{8}$ $\frac{5}{6}$ maioris summe q pl's d ipa summa $\frac{7}{12}$ 11 oll' g' $\frac{7}{12}$ 11 p
20 7 p 1 7 duudecl utiq mlcem p 17 7 d' pma duuplice excessus $\frac{5}{6}$ 6 7 d' su excessus
$\frac{2}{47}$ 7 beb dnos ipoi. Processum e supi ipliat ai $\frac{7}{8}$ $\frac{5}{6}$ possum utm ipliat ai
$\frac{7}{8}$ $\frac{1}{6}$ prede lic. Jnuenti e supi q p'm bt $\frac{1}{8}$ minoris summe. 7 pl' di 4 7 fs bt $\frac{1}{6}$ mediae
summe 7 pl' 7 un portis reducte fm b dnos ipoz i portee ai uelit ducatz ai sup'am
7 nos reducam cog p'mu i portee minoris summe d q p'm bt $\frac{1}{8}$ 7 pl' di 4 7 qm sol's
bt $\frac{1}{6}$ mediane summe. 7 pl' 7 bebit d minoi summa sili' $\frac{1}{6}$ 7 dnos 7 7 in sr $\frac{1}{6}$ ex ipo
dno q e a minoi summa usq; ad mediana. g' fs bt dnos $\frac{1}{6}$ 7 pl' d $\frac{1}{6}$ minoris summe.
Qr me utiq bnt $\frac{1}{8}$ $\frac{1}{6}$ minoris summe 7 dnos $\frac{1}{6}$ 12 q q'ntu al' ai sit summa eorum tm. s.
maio 7 ipa maio summa sit 2 pl' minoi. summa g' $\frac{1}{8}$ $\frac{1}{6}$ minoris summe ai dnos $\frac{1}{6}$ 12 st
q'ntu mino summa ai di 2 Qr excessus 2 excessus portee remanebt $\frac{1}{8}$ $\frac{1}{6}$ minoris summa
ai dnl $\frac{1}{6}$ 10 q'ntu minoi summa. Qr excessus $\frac{1}{8}$ $\frac{1}{6}$ d minoi summa remanet $\frac{1}{6}$ 10 quia
si possum ee 2 4 excessum m $\frac{1}{8}$ $\frac{1}{6}$ remanebt 17 q 17 ai uelit ee $\frac{1}{6}$ 10 oll' $\frac{1}{8}$ d $\frac{27}{47}$ s.
2 p $\frac{1}{6}$ 10 7 duudes p 17 erit p $\frac{1}{8}$ minoris summe $\frac{27}{47}$ 1 ai quo adius 4 quos primi
bt pl's d $\frac{1}{8}$ minoris summe et $\frac{27}{47}$ 6 7 tot supi inuenti e hic p'mu. Eudeq; mo m'cau
$\frac{1}{6}$ d $\frac{27}{47}$ s. 4 p $\frac{1}{6}$ 10 7 duudes p 17 7 sr addes postea sr mm q excessus erit tm
$\frac{1}{6}$ 7 quos sol's bt pl's d $\frac{1}{6}$ minoris summe 7 beb $\frac{19}{27}$ 3 p dnos sr ut supra.



dune qñtatl duoy ꝓpõr ut ait mmõ lũma. uno pl' ait in ariana duo pl' mediana. ꝙ
t pl' minor q̃ t vt aũ so ut ait maior. ꝙ ꝑ pm' bitul 7 qc ũ fr bb 1 mm' quary
qua' ũ ꝓ li ꝓ dil ad fr vũg pm' fr vũg 7 q' qm fr bene ꝓ pmut 5/6
mediane lũme. Cr ꝓ pma bõf 5/6 mediane lũme mm' di 7 q' dat a lat 7 m
di 1 q' actuf ca. l. mm' di 8 fol uo 1/6 cor mediane lũme pl' di 7 ꝑ tul dic
muenes expectacõe fr. pm' bie 1/8 maoug fũme. di 4 quog dat fo. Cr 7/8 cor
maoul lũme mm' ipi 4 mm' t q̃minuit a ad habẽdũ septupl pm' q̃ mo
lidat pot reducẽ portes ꝓ mportõibz cr lib 7 ũ dicat lũme ꝙ 7 m
ꝑtat opat fm q̃ supi ficam 7 ut hb liqd of. reducam es ipm mediane
lũme. 8 cdm unũ medũ cr ibz modul. hc 6 fs 1/6 mediane lũme pl' di 7 pm' ut
bi 1/8 maoul lume di 4 Cr qm maoi lũma 6 t pl' mediane lũme cr 1/8 tm
lũme 1/8 pug dcũl t .s. 1/4 uni' cr pl' 1/8 mediane lũme hc 1/8 mediane lũme
ai 1/4 uni' ũ 6 q̃tũ 1/8 maoul lume. Cr qa pm' 1/8 mai 1/8
mediane lũme di 1/4 4 g' m uaty bi 1/8 1/6 mediane lũme bi 7 4 1/4 5/12
hãc di ipi mmoꝝ lũmã to g 1/8 1/6 mediane lũme cr ũ 1/4 12 fũt q̃ lũme
lũma. Cr fuatq; ponat adiac 1 cr 1/8 1/6 mediane lũme ai dcũs 1/4 12 q̃tũ q̃ me
diana lũma ai ipũ fũt 1 pl' minor. Ergo qm g 1/8 1/6 mediane lũme q̃ pa lũma
remanẽ 1/4 12 7 q̃ q̃ quatuol d 1/8 1/6 cor lũme q̃ 1/8 vt 4 .s. 12 g 1/4 12 7 denud
lũma p 17 7 bẽ g 1/8 mediane lũme 7/17 5/17 t ai q̃ 3 adiug vi 1/4 4 redit 3 dcũs p
mu bis 10/17 7 Cr ualẽ 1/6 d vt 4 .s. 1 p 1/4 12 7 denudes p 17 q̃ b g 1/6 mediane lũme
7/17 2 ai q̃ adiuol 7 q' fol bi pl' d 1/6 mediane lũme redlet ꝓcrẽ pl' 7/17 10
Cr ai q̃ dicam 3 latꝰ pot ꝓ pa q̃ ꝓnat uc uniſoꝝ fr fua mlgmẽ q̃ ꝓ. q
uõ minuat ei uc meli 9 plẽdat q̃ 3 fol q̃ ꝓnat mq̃ pm' bitus 7 q
bit 6 pl' qua q̃q; ꝓ. 7 fol bical 4 cr dcũl pm' bit septupl cl mm' dus 8
hic ai q̃ mmõ lũma 6 mm' q̃tuatẽ õũ dcũs ꝓ d q̃ fit fuꝑfluus mane
mor ñ cr cul muenes pmu bie 5/6 mm' dẽ 1 fm 1/6 cor lũme pl' di 7 media
na q̃ lũma 6 q̃tuat dcũs q. 7 q. 7 q. 7

6 q̄l p̄m̄ bē pl'd' 1/8 mediane sūme eī 7/17 8 7 tot bē p̄m̄. Jtē ut hāt 1/6 mediane sūme mlt 4 p 12 7 duudes p 17 7 addes 6 q̄l ss bē pl'd' 1/6 mediane sūme exbē 14/17 8 p dūs sedi bōis. Qđ ꝯ p regulā recū potes iuenire. si p̄cās fm hāc tē 7 dūos 7 m q̄nq; reg mūd dī 1 q; eī p̄m̄ hāt 7 aso. remanebūt so reg una. 7 p̄m̄ habebūt reg q̄ duos 6 pl' q̄nq; plo eī. Silr si sedes būt 4 apo. remanebūt ipī 10 q̄nq; reg mūd dī 6 7 sedes hebūt tē una 7 dūos 12 q̄ eī dūs 8 eq̄nē septuplo dūoꝝ. sedi. s. tēnenti q̄nq; regs mūd dī 12 7 q̄bz dī 12 aduūs abuūq; pāte eī 24 reg q̄ eq̄nē uni reg 7 dūos 62 q̄r diminuta abuūq; pāte remanebūt 12 reg q̄ eq̄nē dūs 62 bē 17 regs dī 71 q̄r duud 21 p 17 ueuer dī 14/17 1 p re una. Et q; ss bē tē eī dūos 7 g̃ hē dūs 14/17 8 silr q; ss bt q̄nq; reg mūd dī 1 mlta 14/17 1 p 4 eī 7/17 7 d'q̄bz tolle 1 remanebūt dī 7/17 8 7 tot būnt p̄m̄. Pbūc unq; modi possūt solui ēs tē duoū hōmū qcēs. sē è exhibz q̄bz in finite q̄ solui ñ possūt q̄l coḡlocs fm tm modū. Qō cōsilī tē tres hōes

Tem tres hoies hūt dūos quoꝝ un' dic̄ ceūs duobz. si dare uls m̄ 7 uīoꝝ dūoꝝ. hic q̄nq̄es tm q̄m uos. sedz dic̄ ceūs. si dare uls m̄ 7 uīoꝝ dūoꝝ hiem septies tm q̄m uos ituus petit dūos 11 7 ꝓponit sc̄ hīc septies tm quā ipī q̄ tē q̄t un' q̄lq; hēbit. hēm regla p regulā q̄nta arboꝝ facēda ē. sic uidēb d'uno q̄q; quā pauc hēbit tot sūme dūoꝝ coꝝ habitus ipīs dūs quos ipe petit ceūs. qđ sic uidēdū ē. cū p̄m̄ acceptus 7 dūos ab alius ꝓponit sc̄ hīc q̄nq̄es tm quā ipī. si tē būit q̄nq; q̄slibz q̄ntitatis regs. 7 reliq duo hēbit una. ccessīc q̄ntitatibz. q̄r p̄m̄ bt 7/6 aliorū dūoꝝ mūd ipīs 7 dūs q̄l q̄nt cadē rēo. ss bt 6/7 tot sūme 7 dūs quos petit reliq. Silr 7 tūs bt 7/8 tot sūme coꝝ mūd ipīs 11 dūs quos petit reliq. g̃ mē q̄s būt 7/8 6/7 7/6 tot sūme mūd dūs 7 7 9 11 hē dūs 7 g̃ 7/8 6/7 7/6 aliorū dūoꝝ ipīs. sē habūdāt sūme coꝝ mūd dūs 7 uñ assumlatur q̄ q̄sto arboꝝ illa 7/8 6/7 7/6 supant logitudinē arboꝝ palmaꝝ 7 q̄r inuenīdū ē quot mā repiant 1/8 1/7 1/6. scām 168 d' quo aīe 5/6 q̄ st 140 7 6/7 q̄s 144 7 7/8 q̄s 147 7 addes insimul eī 142 1 d'q̄bz exhibe 168 remanebūt 67 q̄ uellēt eē 7 q̄r mlt 140 p 7 duud p 67 exbē dūs 98/67 14 7 tot būnt p̄m̄ hō būnt 7 dūs quos petit reliquus q̄r exhibe 7 d' 98/67 11 remanebūt 98/67 7 7 tot būnt p̄m̄. Jtē ut hāt dūos sedi mlta 14 p 7 7 duud p 67 exbē 206/67 14 d'q̄bz exhibe dūos 7 q̄l sz petit reliq remanebūt dūs 206/67 4 7 tot būnt sz. Jtē ut hāt tēu hōis mlta 14 p 7 7 duude ūm p 67 exbē 274/67 14 d'q̄bz exhibe dūos 11 quos tēu petit remanebūt dūs 274/67 7 tot būnt tēu aī uō petat so. sedz tēo. 7 tēu p̄mo inuenīes in modū soluūtis i quarta



pāte hūs capituli. 7 7 in su pte eleuatuhy. Et eodem sēm alū modum

Tem hoies sūt tres 7 p̄mus hūt 7 exdūs alioꝝ hāt q̄nq̄es tm quā ipī 7 unū pl' sedz hūt 9 ab alius hāt septies tm q̄m ipī 7 unū pl' tēu hūt 11 ab alius hāt septies tm q̄m ipī 7 unū sūr pl'. Jn hac aī duc sūme gliādo q̄ q̄z maior ē q̄ntitat ullor tm minor ē 1 minor maior. Et q̄m p̄m aī 7 exdūs alioꝝ hēt q̄nq̄es tm quā ipī. 7 pl' ipīm 7/6 minoꝝ sūme minor dī 6 hīc necesse ē. p eas g̃ fm aī dūs 9 reliq 7/6 ades minoꝝ sūme minor dīs hīc iuenies. aī ipe aī 9 dūs hāt septies tm q̄m reliq. 7 pl' Rurlī aī tēu hūt 11 exdūs alioꝝ hāt septies tm q̄m ipī 7 pl'

ꝑm hic $\frac{7}{8}$ minoꝝ sume minꝝ dī 10 ñ dubitaē. g̃ mē ꝯ hō $\frac{7}{8}\frac{5}{7}\frac{5}{6}$ minoꝝ sūme minꝝ dī 6 facit maiorē sūmā. Qr̃ si ecthaē mī 1 iq̃ maior sūma sr̃ hūdat mi noie remanebt $\frac{7}{8}\frac{5}{7}\frac{5}{6}$ minoꝝ sume minꝝ dī 24 eq̃lel eidē minoꝝ sūme. Qr̃ $\frac{7}{8}\frac{5}{7}\frac{5}{6}$ minoꝝ sūme sr̃ habūdat ꝑm sūmā in 24 qr̃ ut in añ cedēto qēe fecerūt. mlt̃ 10 ꝑ 24 7 duudes ꝑ 6 7 hēb ꝑ $\frac{5}{6}$ minoꝝ sūme $\frac{81}{24\,6\,7}$ 1 7 d̄ qbz ecthe 6 qł ꝑm hēt minꝝ d̄ $\frac{5}{6}$ minoꝝ sūme remanebt $\frac{81}{24\,6\,7}$ 7 7 hoc hūt ꝑm. Jtē mlt̃ 11 ꝑ 24 7 duudes ꝑ 6 7 ꝑ $\frac{5}{7}$ minoꝝ sūme hēb $\frac{181}{24\,6\,7}$ 1 7 d̄ qbz ecthe 8 qł ꝯ hēt minꝝ $\frac{5}{7}$ minoꝝ sūme remanebt $\frac{181}{24\,6\,7}$ 4 7 hoc hūt sedz. Jtē mlt̃ 12 7 ꝑ 24 7 duudes ꝑ 6 7 hēb ꝑ $\frac{7}{8}$ miꝝ sūme $\frac{276}{24\,6\,7}$ d̄ qbz ecthe 10 qł tm̄ hēt minꝝ d̄ $\frac{7}{8}$ minoꝝ sūme remanebt $\frac{276}{24\,6\,7}$ 7 hoc hūt tm̄

Tem ꝑm petit relq̃s 7 hāt 1 pl̃ quā q̃nq̃el ꝛpī. sedz petit 9 7 hāt 2 pl̃ quā septē ꝛpī. Tertī petit relq̃s 11 7 hāt 3 pl̃ quā septē ꝛpī. Jn hac aū q̃tuor sūme ꝙ ꝑsidūt q̃ū ꝑma 7 maior ē q̃nauꝰ dr̃oꝝ ꝛpoꝝ. Scđa 1 minꝝ. Tertia 2 minꝝ ꝑma uł 1 minꝝ secđa. Quarta 7 minō. 7 3 minꝝ ꝑma. uł 2 minꝝ ſa. uł 1 minꝝ ctia. Et q̃m ꝑmꝝ hūt 7 excessꝰ relq̃t hoīnū. hēt q̃nq̃el tm̄ qua ꝛpī. 7 pl̃ necesse ē ꝛpm hīe $\frac{5}{6}$ se sūme minꝝ d̄ 6 qr 1 remanet ei qe 7 ꝑducat sm̄ q̃. efficiē ipa ſa sūma. Exhi aū ꝙhēdē potūt q̃ fs hēt $\frac{6}{7}$ ctue sūme minꝝ 7 cū sr̃ hūdet ei 2 qe 9 qł petit relq̃s. Et tm̄ hēt 2 demal d̄ 11 ſ. 8 minꝝ d̄ $\frac{7}{8}$ minoꝝ sūme. hīc utiq; intellectꝰ potꝰ redigē dr̃os unꝰ aliq; ī pcessū aliis 7 q̃tuor ductuꝝ sūmaꝝ redigūt ē ī minoꝝ sūma sic. Qm̄ ſa sūma ē 2 pl̃ minoꝝ ei $\frac{5}{6}$ se sūme $\frac{5}{6}$ d̄ dr̃ūl 2 ſ. $\frac{5}{7}$ 1 pl̃ d̄ $\frac{5}{6}$ minoꝝ sūme. vñ ai ꝑmꝰ hāt $\frac{5}{6}$ se sūme minꝝ 6 hēb $\frac{5}{6}$ minoꝝ minꝝ $\frac{1}{2}\frac{1}{4}$ qr ecthaē $\frac{7}{2}$ 1 d̄ 6 rema nēt $\frac{1}{2}\frac{1}{4}$ Jtē q̃ ctia sūma ē 1 pl̃ minoꝝ ei $\frac{6}{7}$ ctue sūme $\frac{6}{7}$ ipī dr̃ū pl̃ d̄ $\frac{6}{7}$ mi noꝝ sūme. vñ ai ſ̄ hāt $\frac{6}{7}$ ctue sūme minꝝ 7 hēb $\frac{6}{7}$ minoꝝ minꝝ dr̃ūl $\frac{1}{7}$ 6 hēt ꝙ ꝙtū hō $\frac{7}{8}$ minoꝝ sūme mīdi 8 g̃ mē ꝯ hūt $\frac{7}{8}\frac{6}{7}\frac{5}{6}$ minoꝝ sūme minꝝ d̄ $\frac{1}{2}$ 1 7 $\frac{1}{7}$ 6 7 8 ſ. minꝝ $\frac{1}{7}\frac{1}{2}$ 18 hūt ctiā 7 ipī 2 pl̃ minoꝝ sūme. ſ. maiorē sūmā. Qr̃ ex tm̄ ipīs 2 exuēt eq̃lu potēd / remanebt $\frac{7}{8}\frac{5}{7}\frac{5}{6}$ minoꝝ sūme minꝝ d̄ $\frac{1}{7}\frac{1}{2}$ 2 1 eq̃ les minoꝝ sūma. qr̃ fm̄ bi d̄ supī ductuꝝ mlt̃ $\frac{5}{6}$ d̄ 168 ſ. 10 ꝑ $\frac{1}{7}\frac{1}{2}$ 2 1 7 duud sū mā ꝑ 6 7 excthel nō $\frac{1}{2}$ 1 7 iuenes ꝑmū hīc $\frac{26}{24\,6\,7}$ 7 Rursū mlt̃ $\frac{1}{7}\frac{1}{2}$ 1 ꝑ 11 qs $\frac{5}{6}$ d̄ 168 7 duud sūmā ꝑ 6 7 ex tribz nō $\frac{1}{7}$ 6 7 hēb dr̃os ſedī $\frac{167}{24\,6\,7}$ 4 Jte mlt̃ $\frac{1}{7}\frac{1}{2}$ 1 ꝑ 7 qs $\frac{7}{8}$ d̄ 168 7 duudes ꝑ 6 7 excthes nī 8 7 hēb dr̃os ctiū. $\frac{1}{24\,6\,7}$ 1 potꝰ ꝺ exducūt sacūl aptō ꝙhēdē. si d̄ mlta utilz ꝛpoꝝ aliq̃d minuēdū. 7 7 d̄ plūs hōīz opa u. cū unꝰ eoꝝ petit relq̃s omnibz. Modus aluus int̄ tres homines

Jnt̄ tm̄ treꝝ hoīes. q̃t ꝑmꝰ 7 ſs petit ctuo hōi dī 7 7 hūt q̃nq̃el quā ipe. Sedz q̃ 7 tū petit ꝑmo dī 9 7 hūt septē quā ipe. Tertī 7 ꝑmꝰ petit ſo 11 7 hūt septē quā ipe. Qua ꝑmꝰ 7 ſs hūt 7 exdūt tm̄ hūt q̃nq̃es quā ipe ctuꝰ hōiē $\frac{1}{6}$ tocī sūme. 7 mīſr dī 7 hīc necesse ē. Silr exponūtibz relq̃t hoīnū ꝙhēdū ꝑmū hīc $\frac{1}{7}$ tocī sūme 7 dī 9 sedm $\frac{1}{3}$ ei dē sūme 7 dī 11 g̃ mē ꝯ hūt $\frac{1}{8}\frac{1}{7}\frac{1}{6}$ 7 dī 7 Qr̃ ꝓēz ut mē ꝯ hūt 168 q̃t $\frac{1}{6}$ ſ. 8 7 $\frac{1}{7}$ ſ. 4 7 $\frac{1}{8}$ ſ. 1 ī unum quicq̃ facūt 7 2 aliz usq; ī 168 ſt 9 7 q̃ 9 7 cū uelit ee 7 ut ſ. $\frac{1}{6}$ tocī sūme eoꝝ mlt̃ 7 ꝑ 8 7 duudes ꝑ 9 7 exhi $\frac{21}{24}$ 7 cū aliz adde 7 quē [illegible] hēt pl̃ d̄ $\frac{1}{6}$

et 8 et 10 ſ. minꝝ 24 hūt ctiā et ipī maiorē sūmā g̃ $\frac{7}{8}\frac{5}{7}\frac{5}{6}$ minoꝝ sūme minꝝ dī 24.

habent tertiam partem et 7 plus habent $\frac{68}{127}$ 23 Et iterum quintum et primum quartam partem et 8 plus s. $\frac{51}{127}$ 20
Et iterum primum et secundum habent quintam partem et 9 plus s. $\frac{117}{127}$ 18 Et iterum secundum et tertium habent sextam partem
et 10 plus s. $\frac{35}{127}$ 18 Et iterum tertium et quartum eiusdem summe habent septimam partem et 11 plus s. $\frac{11}{127}$ 18
Tertium ut separetur dicitur unus a duobus alterius. adde duos primum et secundum s. $\frac{117}{127}$ 18 cum duobus tertium et quartum
s. cum $\frac{11}{127}$ 18 erit $\frac{1}{127}$ 37 residuum vero quod est usque in summa eorum omnium s. $\frac{77}{127}$ 59 habet quintus
hoc quod residuum est $\frac{76}{127}$ 12 quibus extractis de duobus quinti et primi remanebunt primo $\frac{12}{127}$ 7 quibus ex-
tractis de duobus primi et secundi remanebunt secundo $\frac{14}{127}$ 11 quibus extractis de duobus secundi et tertii remanebunt tertio
hoc $\frac{19}{127}$ 7 quibus extractis de duobus tertii et quarti $\frac{119}{127}$ 10 remanebunt quarto hoc.

Aliter quantum inter secundum et tertium ut ostensum est superius habent $\frac{1}{6}$ totius summe quinque hominum et dicitur 10 [illegible]
quintum habent $\frac{1}{2}$ eiusdem summe et dicitur 7 ergo inter ipsos quantum habent $\frac{1}{6}$ et $\frac{1}{2}$ s. $\frac{1}{2}$ summe et dicitur 17 [illegible]
primo remanet $\frac{1}{2}$ eiusdem summe minus ipsi 17 [illegible] $\frac{1}{2}$ et $\frac{1}{4}$ habent $\frac{1}{7}$ summe et dicitur 11 [illegible]
tum et primum habent $\frac{1}{4}$ summe et dicitur 8 ergo ipsi quantum habent $\frac{1}{7}$ $\frac{1}{4}$ s. $\frac{11}{28}$ summe et dicitur 19 [illegible]
remanet residuum summe s. $\frac{17}{28}$ minus ipsis 19 [illegible]
[illegible] primum et secundum s. $\frac{1}{2}$ summe et dicitur 7 cum $\frac{1}{4}$ et dicitur 9 cum $\frac{8}{14}$ summe et dicitur 16 [illegible]
ma remanet tertio hoc $\frac{7}{14}$ summe minus ipsis 16 [illegible]
secundum et tertium s. $\frac{1}{4}$ summe et dicitur 8 cum $\frac{1}{6}$ summe et dicitur 10 [illegible] $\frac{4}{12}$ [illegible] 18 [illegible]
net quarto hoc $\frac{7}{12}$ summe minus ipsis 18 [illegible]
quarti s. $\frac{1}{4}$ summe et 9 cum $\frac{1}{7}$ summe et 11 [illegible] $\frac{12}{34}$ [illegible] 20 [illegible]
hoc $\frac{23}{34}$ minus ipsis 20 Inventa autem [illegible]
trium hominum operari. **De homine qui ad vendendas tres margaritas constantinopoli proparavit**

Quidam mercator dixit constantinopoli tres margaritas [illegible]
aliquid. secundum duplum prime. Tertia si quidem duplum [illegible] Con-
stantinopolitanus exigebat decimam [illegible] margaritarum [illegible]
quidem vendidit prima margarita [illegible] maiorem [illegible]
[illegible] et hoc quod superfuit ei fuit $\frac{1}{8}$ pretii [illegible] margarite [illegible] $\frac{1}{10}$ $\frac{1}{3}$ 21 [illegible]
unius cuiusque margarite [illegible]
ut dicamus 10 pro [illegible] 20 [illegible] $\frac{2}{3}$ 39 [illegible] $\frac{1}{3}$ [illegible]
quibus [illegible] $\frac{2}{3}$ 69 [illegible] $\frac{1}{10}$ [illegible] $\frac{2}{3}$ $\frac{9}{10}$ 6 [illegible] 10 [illegible]
pretium primo [illegible] $\frac{1}{3}$ $\frac{1}{10}$ 3 [illegible] $\frac{1}{8}$ [illegible] 20 [illegible] $\frac{1}{3}$ 22
net $\frac{26}{30}$ quas [illegible] $\frac{1}{10}$ $\frac{1}{3}$ 21 remanet $\frac{9}{10}$ 20 [illegible]
[illegible] aliquid. Secundum [illegible] Tertia valeat [illegible]
[illegible] pretio prime margarite [illegible] $\frac{1}{8}$ pretii [illegible] $\frac{9}{10}$ 20 [illegible]
[illegible] pretio prime margarite 20 [illegible] 40 [illegible] 80 [illegible]
140 quorum $\frac{1}{10}$ s. 14 [illegible] 20 s. [illegible] pretio prime margarite [illegible] 6 [illegible] $\frac{1}{8}$
pretii [illegible] margarite s. [illegible] 40 [illegible] remanet 1 [illegible] $\frac{9}{10}$ 20 [illegible] $\frac{9}{10}$ 20 [illegible] 20 [illegible]
[illegible] 18 [illegible] 10 [illegible] margarite [illegible] 428 [illegible]
margarite. [illegible] 896 [illegible] $\frac{2}{3}$ 1711 **De eodem per regulam rectam**

Pone pro pretio margarite [illegible] $\frac{1}{3}$
[illegible] $\frac{1}{3}$ [illegible] $\frac{1}{10}$ s. $\frac{7}{10}$ [illegible] $\frac{1}{30}$ [illegible]
prime margarite remanebunt $\frac{3}{10}$ [illegible] $\frac{1}{30}$ [illegible] $\frac{1}{8}$ [illegible] $\frac{1}{10}$ $\frac{1}{3}$ 21
habent $\frac{1}{4}$ prime margarite [illegible] $\frac{1}{10}$ $\frac{1}{3}$ 21 [illegible] $\frac{1}{30}$ [illegible] $\frac{3}{10}$ [illegible]

$\frac{1}{4}$ rei ⁊ bz $\frac{2}{5}$ 21 Item coīt auferat $\frac{1}{4}$ rei remanebit $\frac{1}{20}$ rei eq̄l d bz $\frac{2}{5}$ 21 Qr̄ in cuplū d $\frac{1}{20}$ rei. s. res eq̄bit in cuplo d bz $\frac{2}{5}$ 21. s. bz 4 28 g̊ ptiū pme margarite 4 28 ut pdixim̄

Est ē ali mod q̄ r̄ usa dr̄ pq̄ue ⁊ possūt solui mlte q̄ōes. nā p r̄ rectā tēdim̄ d pncipio ad finē q̄ōis pusā faciam̄ cōtrariū q. uolum̄ i hac q̄ōe dmōstrare i q̄ ppōit sr̄ $\frac{1}{10}$ ptiū margaritarū d ptio pme margarite remāsisse $\frac{1}{8}$ ptu sr̄ ⁊ i sr̄ bz $\frac{1}{10}$ $\frac{1}{2}$ 21 a q̄bz sūma m̄ initiū. q̄m ptiū sr̄ margarite. ē duplū ptu pme g̊ $\frac{1}{8}$ ptu sr̄ ē q̄ntū $\frac{1}{4}$ ptu pme. G̊ d ptio pme margarite. q̄s pōas ēē rē remāsit $\frac{1}{4}$ ipi. ⁊ in sr̄ bz $\frac{1}{10}$ $\frac{1}{2}$ 21 pt solutōm $\frac{1}{10}$ pdicte q̄ $\frac{1}{10}$ ut supdictū ē fuit $\frac{7}{10}$ rei min̄ $\frac{1}{20}$ uni bz. Sz cū d re exēbit $\frac{1}{4}$ ipi ⁊ bz $\frac{1}{10}$ $\frac{1}{2}$ 21 q̄ eq̄nt $\frac{7}{10}$ rei min̄ $\frac{1}{20}$ uni bz. si coīt addat bz $\frac{1}{10}$ $\frac{1}{2}$ 21 er̄ $\frac{3}{4}$ rei q̄ eq̄nt $\frac{7}{10}$ eidē ⁊ bz $\frac{2}{5}$ 21 Qr̄ si coīt auferat $\frac{7}{10}$ rei remanebit $\frac{1}{20}$ rei equal d bz $\frac{2}{5}$ 21 ut p regla rectā inuenim̄

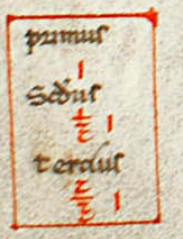
remanēt $\frac{3}{4}$ rei min bz $\frac{1}{10}$ $\frac{1}{2}$ 21

Valeat q̄dē sa margarita q̄rta uni bz pl duplo ptu pme **Alit de tribz margaritis**

Tertia quoq̄ ualeat duplū sr̄ min̄ tertia uni bz. Cui q̄ōis solutōm si p regulā rectā inuenire uis. pōe pma ualē rē. Qr̄ sa ualebit duas res addita q̄rta bz. Et tertia ualebit uiii. res sexta bz addita. q̄bz insimul addit̄ er̄ septē res. ⁊ q̄rta ⁊ sexta bz. q̄r decima q̄ $\frac{7}{10}$ rei ⁊ $\frac{1}{24}$ uni bz extracta d re. s. d ptio pme remanet $\frac{3}{10}$ rei min̄ $\frac{1}{24}$ uni bz q̄ eq̄nt $\frac{1}{8}$ sr̄ ⁊ bz $\frac{1}{10}$ $\frac{1}{2}$ 21 Sz $\frac{1}{8}$ sr̄ eq̄t $\frac{1}{4}$ pme ⁊ $\frac{1}{32}$ bz. g̊ $\frac{3}{10}$ rei min̄ $\frac{1}{24}$ bz eq̄t $\frac{1}{4}$ rei ⁊ bz $\frac{1}{32}$ $\frac{1}{10}$ $\frac{1}{2}$ 21 Si coīt addat $\frac{1}{24}$ bz er̄ $\frac{3}{10}$ rei q̄ eq̄nt $\frac{1}{4}$ rei ⁊ bz $\frac{1}{32}$ $\frac{1}{24}$ $\frac{1}{10}$ $\frac{1}{2}$ 21 coīter auferat $\frac{1}{4}$ rei remanet $\frac{1}{20}$ rei q̄ eq̄nt. $\frac{1}{32}$ $\frac{1}{24}$ $\frac{1}{10}$ $\frac{1}{2}$ 21 reintegr g̊ rē tuā. s. mlta $\frac{1}{32}$ $\frac{1}{24}$ $\frac{1}{10}$ $\frac{1}{2}$ 21 p 20 q̄ mltio ulgarit sic fit mlcat pmū 20 p 21 faciūt 4 20 ⁊ 20 p $\frac{1}{10}$ faciūt 2 ⁊ 20 p $\frac{1}{24}$ faciūt $\frac{5}{6}$ ⁊ 20 p $\frac{1}{32}$ faciūt $\frac{5}{8}$ q̄bz insimul iūctis faciūt bz $\frac{1}{8}$ 4 20 ptio pme. Qr̄ ptiū sr̄ ē $\frac{1}{2}$ 860 tertie $\frac{2}{3}$ 1720 soluit quid h q̄o ⁊ ei similes p primum modū etiam ⁊ p regulam usam. **De tribz hōibz qui i equalr̄ colligūt bursas**

faciūt $\frac{2}{3}$ 6 et 20

Tres hōies inuenerūt bizātios ex q̄bz uni q̄sq̄ sūpsit in eq̄lit sic. q̄ mltio bizātiorū pmi in tertiā sūme fac̄ q̄ntū mltio bizātiorū sedi in q̄rtā sūme. ⁊ q̄ntū mltiplicatio bizātiorū tertii in q̄ntā eidē sūme. Et hec tres mlcatōes eq̄les i unū redacte faciūt eidē sūmā bizātiorū quā ipi tres hōies inuenerūt. Queritur q̄ fuit illa sūma. ⁊ q̄t unus q̄sq̄ ex ea assūpsit. Pōe itaq̄ ut pmi sumet bz 3 ⁊ sedus 4 ⁊ tertius 5 ideo q̄ mlcatio cuilibz nūi in tertiā partē d 3 ē q̄ntū mlcatio eidē nūi in q̄rtā partē d 4 ul in q̄ntā partē d 5 g̊ ⁊ mltio cuilibz tertii nūi in 3 ē q̄ntū mlcatio q̄rte eidē nūi in 4 ⁊ q̄ntū mlcatio q̄nte eidē nūi in 5 adde 3 ⁊ 4 ⁊ 5 er̄ 12 p sūma bizātiorū mūctorū. mlca itaq̄ 3. s. bizātios pmi p tertiā. Sūme. s. p 4 er̄ 12 q̄ sua ⁊ mlca bizātios sedi. s. 4 p q̄rtā partē sūme. s. p 3 er̄ similr̄ 12 q̄ sua ⁊ mlca itm̄ bizātios tertii uidel 5 p q̄ntā sūme. s. p $\frac{2}{5}$ 2 er̄ similr̄ 12 Adde g̊ has tres mlcatōes er̄ 36 q̄ uellet ēē 12 qr̄ dices p 3 que pono i q̄ntitate bizātiorū pmi uenit 36 q̄d ponā ut ueniat tm̄ 12 mltibz g̊ 3 p 12 ⁊ diuides p 36 exibit bz 1 ⁊ tot sūpsit pmi hō ex reptis bz. Item eadē rōe mlca 4 s. bz sedi p 12 ⁊ diuides p 36 exibit bz $\frac{1}{3}$ 1 ⁊ tot sūpsit sr̄s hō ex ipis bizātus. Rursū sta rōe mlca bz 5 tertii hōis p 12 ⁊ diuides itm̄ p 36 exibit bz $\frac{2}{3}$ 1 p q̄ntitate inuentione tertii hōis.

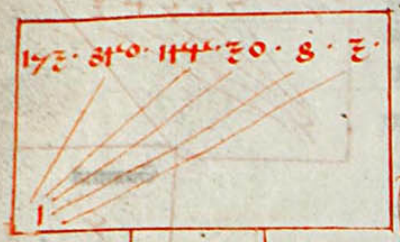


Alit p pscriptis $\frac{1}{5}$ $\frac{1}{4}$ $\frac{1}{3}$ pōe 3 ⁊ 4 ⁊ 5 ⁊ adde eos insimul er̄ 12 q̄ diuid p nūm hōinū. s. p 3 exibit 4 ⁊ tot bizātios reperier ipi. ex q̄bz pmi sūpsit $\frac{2}{3}$ h ē bz 1 sedus $\frac{4}{3}$ h ē bz $\frac{1}{3}$ 1 Tertius sūpsit $\frac{5}{3}$ uni bz. h ē bz $\frac{2}{3}$ 1 ut pdixim̄us. **De eodē de q̄nq̄ hōinibz**

Tem ⁊ quinq; hoies bizãtios repier ecclã; ita sup̃sit una ⁊ qlz i eccl̃ sic q; mltãtio bizãtioꝝ
pma mitiã sume fac̃ ⁊ntũ mltãtio bizãtioꝝ sedi in q̃rtã sume. ⁊ ⁊ntũ mltãtio biz̃
tioũ titi in ⁊ntã ei dẽ sume. ⁊ ⁊ntũ mltãtio bizãtioꝝ q̃rti hoiꝝ in septã sume. Etiã et
⁊ntũ mltãtõ bizãtioꝝ ⁊nti hoiꝝ i septimã ei dẽ sume. ⁊ hec ⁊nq; mltãtões i simt una
sicaũt eandẽ iuctã suma. Cui ita; h̃ positio p̃ma regulã. h̃ ẽ p modũ arboꝝ. solu
positio. th̃ q̃lt̃ alit̃ soluat dmõstrato aupmi. ⁊ pcha; ½ 7 ¼ 7 ⅛ 7 1/16 7 1/32 pẽ i ordine
7 7 ¼ 7 ⅛ 7 1/16 7 1/32 ⁊ addc ecꝝ in simt ei 7 ⁊ 7 tot ⁊nte repier ipi. ideo qz equaleꝝ mltã
tões fuer ⁊ ecclã; ⁊nus pma sup̃sio ⅞ una biz̃. 2 dꝝ ⅞ titus ⅞ h̃ ẽ biz̃ 1 Quarꝝ 6/8
h̃ ⅛ 1 Quinꝝ ⅞ hec ẽ biz̃. Alia de quinq; hominib; ⅞ 1

Rursus ⁊nq; hoies bizãtios i uenier ecclã; una ⁊ qlz collegi in eccl̃ sic q; mltãtio biz̃ p
ma mitiã sume. h̃ ẽ mltio totius sume in titã pt̃e bizãtioꝝ ipi pma fac̃ aliq̃e nu
merũ. Et mltãtio quarte pt̃is totius sume i bizãtiis sedi hoiꝝ. ut eqlis fac̃ duplũ
mltãtõis pcedẽtis pme hoiꝝ. Et mltãtio bizãtioꝝ titi in ⁊ntã pt̃e sume. ⁊ eqlis fac̃
iplũ mltãtõis sedi hoiꝝ. h̃ ẽ septuplũ mltãtois pme. Et mltãtio bizãtioꝝ quãti i septã
parte sume. ut eqlis fac̃ ⁊druplũ mltãtõis titi hoiꝝ. h̃ ẽ octuplũ. ⁊druplũ mltãtu
dis pme hoiꝝ. Itẽ ⁊ mltãtio bizãtioꝝ ⁊nti hoiꝝ in septimã partẽ sume. ut septima
pt̃e bizãtioũ ipi ⁊nti hoiꝝ. in totã suma fac̃ ⁊nauplũ mltãtõis quãti hoiꝝ. h̃ ẽ ce
tuplũ octauplũ mltãtõis pme hoiꝝ. Et hec ⁊nq; mltãtões i unũ quicte faciũt eãdẽ
repti sumã. Queritur q̃ fuit illa suma. ⁊ q̃t uni ⁊q; ecclie collegit. Qua ꝓpoit q; mlt
tio totius sume i titã pt̃e bizãtioũ pme fac̃ aliq̃e numũ bizãtioꝝ q̃ habet ½ pot
g ut ipe colligẽt bizãtioꝝ ½ Quoꝝ titia pars ẽ biz̃ 1 q; multiplo in suma aictoꝝ bizã
tioũ fac̃ aliq̃e numũ. s. ipam eãdẽ suma. Et q̃a ꝓpoit q; mltãtio q̃rte pt̃is bizãtio
ũ sedi hoiꝝ in totã suma fac̃ duplũ mltãtõis titie pt̃is bizãtioꝝ pme in ipã eandẽ
suma. ponẽdũ ẽ qd sedes colligẽt talẽ numũ bizãtioꝝ. q̃ quãta pars sit duplũ titie
pt̃is bizãtioũ pme. cuiꝰ nullus 8 Cuiꝰ quãta pars ẽ ½ q̃ duplũ titie pt̃is. bizã
tioũ pme. s. 4 1 Itẽ q; mltãtio ⁊nte pt̃is bizãtioũ titi hoiꝝ i totã suma ꝓpoit fac̃
iplũ mltãtõis q̃rte pt̃is bizãtioꝝ sedi i eadẽ suma. oportet g ut titi hõ colligẽt tot
bizãtios ecclã; q̃nta pars sit iplũ q̃rte pt̃is bizãtioũ sedi. g pẽs ut ipe colligetur
biz̃ 10 q̃nũ ⁊nta pars. s. biz̃. 6 ẽ iplũ quarte pt̃is bizãtioꝝ sedi. s. 4 Adhuc q; mlt
iplo septe pt̃is. biz̃. quãti hoiꝝ i sta suma ꝓponit fac̃ ⁊druplũ mltãtõis ⁊nte pt̃is
biz̃. titi ipa suma ponẽdũ ẽ. ut ipe quãt hõ colligẽt tot bizãtios ecclã; septa pẽs
fiat ⁊druplũ ⁊nte pt̃is bizãtioũ titi hoiꝝ. ei biz̃. 144 quoꝝ septa pars fit biz̃ 24
quis ⁊druplũ ⁊nte partis bizãth. titi hoiꝝ. s. 4 Rursus q; mltãtio septime partis bi
zantioũ ⁊nti hoiꝝ in totã suma. ꝓpoit fac̃ ⁊nauplũ mltãtõis septe pt̃is bizã
tioũ quãti hoiꝝ i ipam suma. oportet q; ponat qd ⁊nti hõ colligẽt bizãtios 810
Itẽ ⁊a septima pars ipoꝝ fit biz̃ 120 q; sit ⁊nauplũ 4 biz̃ 24 septe undecies partis
bizãtioũ quãti hoiꝝ. Quo facto. colliges p̃ceptas bizãtioũ pitiõis i unũ. s. biz̃. 24
pme hoiꝝ. 7 biz̃ 8 sedi. 7 biz̃ 20 titi 7 biz̃ 144 quãti. 7 biz̃ 810 ⁊nti erũ biz̃ 1024 que
nũs ꝓpoit ꝙ repta suma. diuide undas i q̃t ascendunt ⁊nq; ptes mltãtõis in ipam suma.
Mltãtio q̃dẽ titie pt̃is bizãtioũ pme in ipa suma. s. 1 in 1024 fac̃ semi 1024 q̃rte
parti 1 expecte. Itẽ mltãtio q̃rte pt̃is bizãtioꝝ sedi. s. 4 in totã sumã undecies in

ponẽdum ẽ qd pmi hõ colligẽt aliqm num



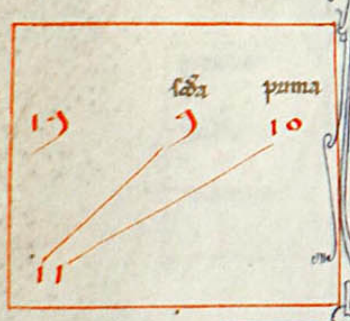
1024 fac bis 1024 qr ꝑuab 2 Item quinta pars bizantiorum tantum hominis s. 6 multiplicata in prescriptis 1024 facit sexies 1024 qr ꝑuab tantum 6 Quarta sexta pars quarti hominis s. 24 multiplicata in 1024 facit uigies quater 1024 qr ꝑuab 24 ad huc septima pars bizantiorum quinti hominis s. bizantium 120 multiplicata in prescripta summa s. in 1024 facit centies uigies 1024 qr ꝑuab 120 que addes cum 24 et cum 6 et cum 2 et cum 1 ꝑuatis erit 1532 ergo in prescriptis quinque multiplicationibus exeunt centies quinquagies et 1024 et cum ipsis quinque multiplicationes non debeat facere ꝑuatis nisi tantum semel ipsam summam dicens 2 que pono in collectione bizantiorum uenientium quinquagies et ipsa summa quod ponitur ut tantum ipsa perueniat semel multiplicabitur ergo 2 per 1 et diuidens per 1532 exibit $\frac{2}{1532}$ unius bizantii et tot reperit primus homo de reperta summa. Similiter si hoc fecerit de positionibus bizantiorum reliquorum quatuor hominum s. de bizantio secundi hominis et de bizantio tertii hominis et de bizantiis 144 quinti hominis. Reperies quod secundus homo collegit ex reperta summa $\frac{8}{1532}$ unius bizantii et tertius homo collegit $\frac{30}{1532}$ et quartus $\frac{144}{1532}$ et quintus $\frac{840}{1532}$ hec bizantii $\frac{74}{1532}$ et collegit ergo hec quinque collectiones minimum faciunt $\frac{1024}{1532}$ hoc est bizantii $\frac{107}{1532}$ 6 et tot reperiunt ipsi.

De duobus hominibus qui inuenerunt bizantium

Duo homines inuenerunt bizantium ex quibus unus quisque collegit inequaliter et id quod collegit primus fuit $\frac{1}{12}$ $\frac{1}{2}$ et id quod collegit secundus et primus lucrando cum sua portione de bizantio 11 fecit bizantium 12 Alter uero de bizantio 12 fecit 14 et sic inter utrumque habuerunt bizantium 100 Quaeritur quot sit summa inuenta et quot unus quisque ex ea collegit. Primum quidem inuenias numerum in quo reperiantur $\frac{1}{12}$ $\frac{1}{2}$ entque 39 et tot pro ipso collige de quibus accipe $\frac{1}{12}$ $\frac{1}{2}$ s. 16 et tot bizantium pro collectione primi qui cum de 11 fecisset 12 multiplicabitur 16 per 12 et diuidens per 11 exibit bizantium $\frac{5}{11}$ 17 quoque ꝑuatis. Deinde quia secundus de 12 fecit 14 multiplicabitur per 14 et diuidens per 12 exibit bizantii 42 quoque addes cum bizantiis $\frac{5}{11}$ 17 erit bizantium $\frac{5}{11}$ 59 qui uellent esse bizantium 100 qr multiplicabitur 16 per 100 et diuidens per $\frac{5}{11}$ 59 exibit pro portione primi hominis bizantium $\frac{1}{2}$ $\frac{99}{109}$ 26 Item eadem ratione multiplicabitur 39 bizantium per 100 et diuidens per $\frac{5}{11}$ 59 exibit pro portione secundi hominis $\frac{64}{109}$ 64 bizantium quibus uicissim cum bizantium $\frac{1}{2}$ $\frac{99}{109}$ 26 primi hominis. Reddunt pro tota summa bizantium $\frac{1}{2}$ $\frac{44}{109}$ 92.

Diuisio de 11 in duas partes

Diuide 11 in duas partes quarum una multiplicata per 9 faciat quantum alia multiplicata per 10 accipiendum est primum quod multiplicatio cuiuslibet partis cuiuslibet numeri in numerum ex quo ipsa pars ducit originem facit quantum multiplicatio alterius cuiuslibet partis eiusdem numeri in numero. Unde ipsa pars deriuatur. Ubi gratia multiplicatio quidem tertie cuiuslibet numeri in 3 ex quibus $\frac{1}{3}$ ducit originem facit quantum multiplicatio quarti eiusdem numeri in 4 ex quibus $\frac{1}{4}$ ducit originem. Qr nona unius numeri multiplicata per 9 facit quantum $\frac{1}{10}$ eiusdem numeri multiplicata per 10 Unde quia proportionem habet decima unius numeri ad nona eiusdem numeri tantum proportionabilem ut una pars de 11 ad aliam. Unde inueniendum est numerus in quo reperiantur $\frac{1}{10}$ $\frac{1}{9}$ quinque 90 cuius $\frac{1}{9}$ est $\frac{1}{10}$ s. 10 et 9 multiplicatio ergo de 9 s. decime de 90 in 10 facit quantum multiplicatio 10 s. $\frac{1}{9}$ 90 in 9 unde uigies 9 et 10 est 19 quod uellet esse 11 multiplicatio ergo 10 per 11 et diuidens per 19 exibit $\frac{14}{19}$ 5 et tot erit una pars residuum de 11 usque in 11 s. $\frac{4}{19}$ 5 erit alia pars que numerus [illegible] 9 et 11 diuisa per 19 [illegible] multiplicatio prime partis in 9 est equa multiplicationi [illegible] 10 [illegible] 10 ad 9 et prima pars ad [illegible] Unde erit sicut 9 uicissim ex 10 et 9 s. 19 ad 9 [illegible] 11 ita 10 ad prima parte et 9 ad [illegible] Qr multiplicanda sunt 11 per 10 et per 9 et diuidenda utraque multiplicatio per 19 [illegible] per regulam [illegible] uis procedere. Pro prima parte [illegible] 11 [illegible] prima parte per 9 [illegible] Item multiplicata 11



mm̃ tr. l. sum̃ parti p̃ 10 erũt 110 mm̃ decẽ rebz q̃ erũt nouẽ rebz. q̃r sic oĩt addẽ
decẽ rel. erũt 19 rez q̃ erũt 110 duidi 10 · p 19 erũt p̃ ꝑma ꝑtẽ $\frac{10}{19}$ 4 q̃bz exceꝑtis d 11
sr̃ erũt p̃ sua parte $\frac{1}{19}$ 4 ut supius inuenimus. **Duulio de 11. in tres partes**
Tensi 11 in tres partes duidẽ uolum̃. q̃m̃ ꝑma mlcata p 4 facet q̃ntũ alia mlcata
p 4 4 q̃ntũ alia mlcata p 6 qr mlcatio q̃rte uni nũi p 4 facẽ q̃ntũ mlcatio q̃rte ei
dẽ nui in 4 4 q̃ntũ mlcatio sexte eidẽ nui in 6 inuenic nũm in q̃ repiant $\frac{1}{6}\frac{1}{4}\frac{1}{4}$
exceptis 60 cui qlamẽ 14 q̃nta ẽ 12 sexta ẽ 10 adde g 14 712 q10 erũt 57 quellent
ẽ 11 qr mlbi 14 712 q10 singulariẽ p 11 4 duidi una quãs mlcatio d ꝑt 57 4
fiabẽ p ꝑma parte $\frac{17}{57}$ r ꝑ sa $\frac{21}{57}$ t ꝑ tia $\frac{36}{57}$ t 4 sic possemus duidẽ 11 erũ 4
q̃dlibet aliam nũm in plures partes. **Duulio d 11 in duas ꝑtes sm aliũ mdm**
Tensi ꝓponat duidẽ 11 in duas partes. quare una mlcata p 3 facies $\frac{1}{t}$ t 0 plus
alia mlcata sili p 3 qr maior pars mlcata p 3 facẽ $\frac{1}{t}$ t 0 maior alia mlcata tacẽ
duidi $\frac{1}{t}$ t 0 p 3 erabit $\frac{1}{t}\frac{t}{3}$ t 4 intra ẽ excedit maior pars minorẽ tã qr mlcata

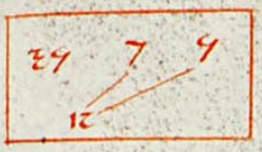
$\frac{1}{t}\frac{t}{3}$ t p 3 facit $\frac{1}{t}$ t 0 g̃ exeuntes $\frac{1}{t}\frac{t}{3}$ t d 11 remanebũt $\frac{t}{t}\frac{11}{3}$ 4 bi ẽ $\frac{t}{t}\frac{t}{6}$ 4 q̃ duidi in
duo aq̃ erabit $\frac{22}{7t}$ t ꝑ q̃libz partẽ. 4 tot fiunt minor pars. reliquũ uo q̃ ẽ usq; in 11
tã $\frac{11}{7t}$ 4 fiunt alia. **Aliꝫ de eodem**
Item ꝓponat duidẽ 11 in duas partes. quarũ ꝑa mlcata p 10 faciat $\frac{1}{t}$ t 0 pl' mlcata
tacẽ ꝑme partis in 3 exeuntes d 11 num̃ q̃ cũ mlcẽt p 10 faciat $\frac{1}{t}$ t 0 q̃ nũs repiẽt
cũ $\frac{1}{t}$ t 0 duidũt p 10 erunt nũs ulte $\frac{1}{t}$ t 0 qd exceꝑto d 11 remanẽt $\frac{t}{t}\frac{11}{3}$ 4 q̃ duidi in
duas partes p supiacẽtã regulã. ita qd mlcatio ꝑme partis p 3 faciat q̃ntũ alia
mlcata p 10 erunt ꝑma pars $\frac{t}{t}\frac{7}{10}\frac{16}{19}$ t q̃ multa exeuntia d 11 qd faciẽs ꝓmodo
quẽ in decimo capl'o d monstrauim. s. acẽ t q̃s sr̃t et exeuntes ea excipis t 4 remanẽs
pẽ sr̃t aũdi ꝑtẽ unge subq̃ sint pordinẽ sup̃iacẽtia nupra. s. $\frac{1}{t}\frac{0}{10}\frac{0}{19}$ 4 p excipis
t remanet minutu 1 q̃ adde ei 7 ẽs sr̃t 10 et 8 aq̃bz usq; in 10 desiũt et
q̃ pone sup 10 4 p excipis eccẽ remane 1 q̃ adde ei 11 q̃ sr̃t sup 19 et 14 aq̃bz usq; in 19 desiũt
q̃ pone sr̃t ꝑtẽ unge 4 p explens 19 mane 1 qd adde ei t q̃s cũ ungulam. 7
exeuntes 3 remanebũt 7 q̃ ꝑtẽ cũ ꝑtẽ unguli. 4 sic habebũ p ꝑa ꝑtis $\frac{1}{t}\frac{t}{10}\frac{t}{19}$ 7
Item si 11 in tres partes duidẽ ꝓponat q̃ sedi mlcata p 4 faciat pl' mlcatiõm p
me in t 4 mlcatio tẽtie p 6 faciat 11 pl' mlcatẽ sede in 4 hi ẽ 21 pl' mlcatione
ꝑme partis p t. Cũ itaq; ultima pars mlcata p 6 faciat 21 plus quã ꝑma pars
mlcata p t g̃ si exꝑa ultima parte exeuntes nũs. q̃ mlcatio p 6 faciet 21 s $\frac{1}{2}$ t
q̃ equabũt ex diuisiõe 21 p 6 remanet exceptũ ultima pars nũs. q̃ cũ mlcatẽ fiũt
p 6 facẽ q̃ntũ ꝑma pars mlcata p t. Item q̃ su pars mlcata p 4 facẽ 10 plusquam
ꝑma mlcata p t si exsedi ꝑtẽ exeuntes nũs q̃ mlcatẽ p 4 faciẽs 10. s t remanebit exceptã su parte nũs. q̃ mlcatio p 4 faciet q̃ntũ ꝑma mlcata p t g̃ exeuntes
t $\frac{1}{t}\frac{t}{7}$ d 11 remanebũt $\frac{1}{t}$ 4 q̃ duidi p sẽm regulam inter tres ptes q̃ su mlcata p 4
4 ita mlcata p 6 faciunt q̃ntũ ꝑma mlcata p t exeuntes ꝑma pars $\frac{8}{t}$ t sedi
$\frac{0}{t}\frac{t0}{t7}$ 1 tia $\frac{0}{t}\frac{18}{t7}$ 1 adde g̃ t ei sedi parte ei $\frac{t0}{t7}$ t simili adde $\frac{1}{t}$ ei tertia ptes
ei $\frac{1}{t}\frac{36}{t7}$ t 4 sic pot fiaẽ d similibz. **De duob; nũis repiẽdis sm dam̃ q̃dã ꝓportiõe**

ꝑs ꝑma
$\frac{4}{7t}$ t
secũda
$\frac{17}{7t}$ 7

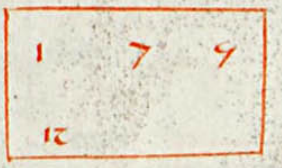
ꝑs prima
$\frac{t}{t}\frac{7}{10}\frac{16}{19}$ t
secũda
$\frac{1}{t}\frac{t}{10}\frac{t}{19}$ 7

prima
$\frac{1}{t}\frac{8}{7t}$ t
secunda
$\frac{0}{t}\frac{t0}{t7}$ t
tercia
$\frac{1}{t}\frac{36}{t7}$ t

Sunt duo nūi quor. ½ unī ē ⅓ altīus 7 cor. mlt̄ato ē q̄ntū cor. aditio. Inuenias
p̄mū duos nuōs q̄ui ½ unī sit ⅓ altīus eisd. 7 Que pōe. p̄sinus nūi 7 adde
4 ai 7 er. 12 sz mlt̄ato d. 4 i 7 fac. 24 q̄ ai uelit ee 12 7 mlt̄a 12 p. 4 7 12 p. 7 et
diuide. utrūq; mlt̄atōe p 24 7 habeb. p̄mū nūm ⅝ 1 sm. ⅝ 2 ut alr. sta 12 diuid



Et si. ꝓpōat. q̄dcūq; q̄nta. p̄te unī ai septima altīus Alr. Sp 7 ap 4.
facaat q̄ntū mlt̄ato nuōr. adimunde addes q̄ntā d. 4 .s. 1 ai ¼ d. 7 er. 2 q̄ntū
p. 4 7 p. 7 7 diuid. utrūq; mlt̄atōm p 24 ut ipa 2 diuid. p 7 ap 4 7 habeb.

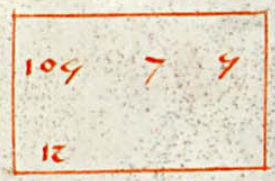


p̄mū nūm ⅝ sm. ⅝ Alr. Rursū si. ꝓponat. q̄ mlt̄ata. q̄nta. parte unī p. septi-
ma altīus facaat q̄ntū aditio unī nūi ai alio mlt̄ab. q̄ntā d. 4 p ½ d. 7 .s. 1
p 1 erit unū. 7 adde 4 ai 7 ut supr. er. 12 q̄ mltb. p. 4 ap 7 7 diuide. utrūq; mlt̄a-
tōm p unū qd fuit. suma mlt̄atōis d. uno in uno supdicis 7 habeb. p̄mū nūm.
60 quorū q̄nta ē 12 sm ē 84 quor. septima ē 12 simlr ut oportet tā mlt̄a-
to 12 p 12 facaat q̄ntū aditio d. 60 am. 84 Quodul aliud d. duob; nūis repēdo

Item q̄ntū unī nuōr. fuit septima altīus. 7 mlt̄ata. q̄nta parte unī p. septimā
altīus fac. q̄ntū adita. q̄nta parte unī ai septima altīus mlt̄ab. 1 p 1 ut supa
dict. unū. 7 addes q̄d unitates simul er. 2 p q̄ mltb. 4 7 7 7 diuide. utrūq;
mlt̄atōe p unū. 7 habeb. p̄mū nūm 10 sm. 14 Alio alia de duob; nūis

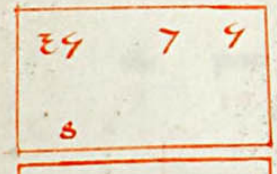
Ad huc ꝓponat. q̄ mlt̄ato uno nuō. paūi facaat aliq̄ mlt̄uplex eorūdē aditōis.
ut dicam. duplū. Addes tūc 4 ai 7 er. 12 q̄ duplicab. er. 24 mltb. q. 24 p.
24 7 diuides utrūq; mlt̄atōm p mlt̄atōm d. 4 i 7 .s. p 24 7 habeb. p̄mū nūm
⅔ 2 sm ⅔ 4 7 nota. q. i oīb; stīs etiā 7 in seq̄ntib; sēp. dam. diuisiōm nūō q̄
ex mlt̄atōe duorū nuōr. colligit. mlt̄atōr. Alio alia d. duobus nūis

Teni si. ꝓponat. ad aditio nūorū facaat aliquā mlt̄atē mlt̄atōis eorūdē ut
dicam. triplū mlt̄ab 12 q̄ st ad aditio d. 4 7 7 peosdē nuōs er. 60 7 84 q̄ diuid.



p dicta mlt̄atē mlt̄atōis d. 4 i 7 .s. p triplū d. 24 idē p 10 4 7 habeb. p̄mū nūm.
sed. ⅔ 4 Alr. sed m aliam questionē

Rursū mlt̄ato nuōrū in se ipōs facaat aliq̄ mlt̄uplex ut dicam. q̄duplū adi-
tois. q̄nte. p̄tis unī nui. cū septima p̄te altīus. q̄duplū d. 2 q̄ st aditio q̄nte
p̄tis d. 4 7 septime p̄tis d. 7 .s. 8 mlt̄a p. 4 ap 7 er. 40 7 96 q̄ diuid. p mlt̄a-
tōm d. 4 i 7 .s. p 24 7 habeb. p̄mū nūm ⅔ 1 sm ⅔ 1 Item aditio q̄nte. p̄tis unī



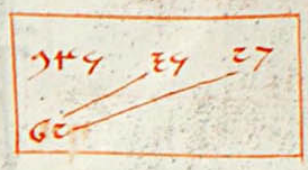
ai septima altīus facaat q̄nauplū mlt̄atōis unī nui in aliū mltb. 2 sm. p. 4 ap
7 er. 10 7 14 q̄ diuid. p q̄nauplū d. 24 .s. p 17 4 7 habeb. p̄mū nūm ⅔ 2 sm ⅔ 4

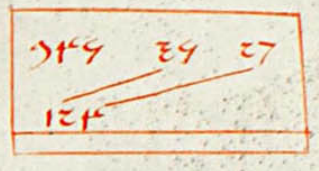
Adhuc mlt̄ato q̄nte. p̄tis unī in septimā altīus sit 3 te qō alia de duob; nūis
septauplū aditois eorūdē p̄tis addes ¼ d. 4 ai ⅓ d. 7 er. 12 quor. septauplū .s.

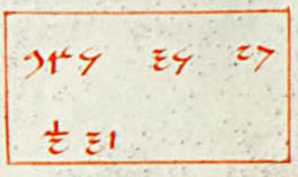
12 mlt̄a p. 4 ap 7 er. 60 7 84 q̄ diuid. p mlt̄atōm q̄nte. p̄tis d. 4 in septimā
p̄tē d. 7 .s. p unū 7 habeb. p̄mū nūm. 60 sm. 84 Decē sm aliam diuisionem

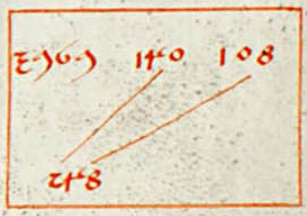
Teni aditio q̄nte. p̄tis unī ai septima. p̄te altīus facaat. septuplū mlt̄a-
tōis eorūdē p̄tis in se mltb. 2 p 4 ap 7 er. 10 7 14 q̄ diuid. p septuplum
mlt̄atōis q̄nte. p̄tis d. 4 in septimā p̄tē d. 7 .s. p 7 7 habeb. p̄mum nūm

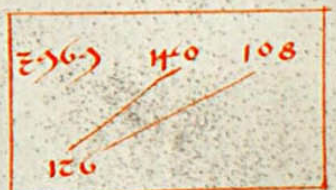
$\frac{2}{7}$ 1 $\overline{\text{sm}}$ 2 possum$^{\text{9}}$ eñ m'tm' alias q̃cl uana^{l} exist$^{\text{9}}$ ꝓpone quoꝝ solutiones
ꝓ stat' sanit' optent' repm possunt. **Diuisio alia inter duos nũos**
Item sint duo nũi equales $\frac{1}{\mu}\frac{1}{2}$ unus st $\frac{1}{4}\frac{1}{\mu}$ alt'us$^{\text{9}}$ m'tm' insimul faciũt unum
one eoꝝ dẽ. p'mũ quidẽ stozũ inuenies duos nuiꝰ quoꝝ $\frac{1}{\mu}\frac{1}{2}$ uni sint $\frac{1}{4}\frac{1}{\mu}$ alt'us
cuiꝰ 2 7 addes 2 cũ 2 4 et 6 2 p q̃ m'ta 2 7 2 4 9 duades utrãq; mt'
tationẽ p sũmã m'tationũ d 2 7 in 2 4 ut duod 6 2 4 7 p 2 7 habeb' p'mum
nũm $\frac{8}{2\,4}$ 1 sed'm $\frac{8}{2\,7}$ 2 **De eodem**
Et si positum fuit' q̃d m'tatio uni' duarũ nuiꝰ · maluũ sit duplũ aduersus
eoꝝdẽ duplũ d 6 2 s. 12 m'ta p 2 7 7 p 2 4 9 duod utrãq; m'tationũ d p sũmã
m'tationis d 2 7 in 2 4 ut 12 duod p 2 4 7 p 2 7 9 habeb' p'mũ nũm $\frac{10}{2\,4}$ 2
sed'm $\frac{16}{2\,7}$ 1 **De eodem**
Et si aduersus duplũ m'tationis eoꝝdẽ. m'tatio 6 2 m 2 7 7 my 2 4 duades p
duplũ m'tationis d 2 7 in 2 4 ut duod 6 2 p duplũ d 2 4 7 d 2 7 9 habeb' primus
nũm $\frac{21}{2\,4}$ sed'm $\frac{42}{2\,7}$ 1 **De eodem**
Item $\frac{1}{\mu}\frac{1}{2}$ p'mi nũi sint $\frac{1}{4}\frac{1}{\mu}$ sed'i. 9 m'tatio p'mi in s'm faciat q̃ntũ aduersus
alterius partis. ut quarũlibet partiũ p'mi in q̃libet partẽ. ut partes sed'i
ut dicam$^{\text{9}}$ q̃d additione $\frac{1}{\mu}\frac{1}{2}$ unus cũ $\frac{1}{4}\frac{1}{\mu}$ alt'us sit quãtũ m'tatio unius nũi
maluũ accipe $\frac{1}{\mu}\frac{1}{2}$ d 2 7 q̃ sunt $\frac{2}{\mu}$ 14 9 adde ea cũ $\frac{1}{4}\frac{1}{\mu}$ d 2 4 s. cũ $\frac{2}{\mu}$ 14 et $\frac{1}{2}$ 21 mlt'
$\frac{1}{2}$ 21 p 2 7 7 $\frac{1}{2}$ 21 p 2 4 9 duades utãq; m'tationũ p sũmã m'tationis d 2 7 in 2 4
9 ut $\frac{1}{2}$ 21 duades p 2 4 7 p 2 7 9 habeb' p'mo nũo $\frac{2}{10}$ p sed'o. $\frac{1}{6}$ 1 **De eodem**
Et si m'tatio nuiꝰ sit q̃druplũ aduersus d $\frac{1}{\mu}\frac{1}{2}$ uni cũ $\frac{1}{4}\frac{1}{\mu}$ alt'us q̃druplum
$\frac{1}{2}$ 21 s. 12 6 m'ta p 2 7 7 p 2 4 9 duod utrãq; m'tationũ p sũmam m'tationis
d 2 7 in 2 4 ut 12 6 duod p 2 4 7 p 2 7 9 habeb' p'mo nũo $\frac{2}{4}$ 2 p so $\frac{2}{2}$ 1
Et si m'tatio d $\frac{1}{\mu}\frac{1}{2}$ p'mi nũi m $\frac{1}{4}\frac{1}{\mu}$ sed'i sit q̃tuplum aduersus p'mi nũi cũ sed'o q̃
$\frac{1}{\mu}\frac{1}{2}$ d 2 7 q̃ $\frac{1}{4}\frac{1}{\mu}$ d 2 4 nõ addunt integrũ cum sint $\frac{2}{\mu}$ 14 oportet ut mul
tiplicent 2 7 7 2 4 p 1 et 108 9 1 40 9 ac $\frac{1}{\mu}\frac{1}{2}$ d 108 q̃ sunt 6 2 7 m'ta ea per
6 2 q̃ sunt $\frac{1}{4}\frac{1}{\mu}$ d 1 40 et 2 9 6 9 9 adde 108 cũ 1 40 et 2 4 8 que m'ta p 108 7 p
1 40 9 duod utãq; m'tationũ p regulã d 2 9 6 9 7 cum b' q̃d cuntare potiꝰ
habebis p'mum nũm $\frac{2\,1\,6}{2\,7\,7}$ 6 sed'm. $\frac{2\,6\,9\,6}{7\,5\,9}$ 8 **De eodem**
Et si m'tatio d $\frac{1}{\mu}\frac{1}{2}$ p'mi ut $\frac{1}{4}\frac{1}{\mu}$ sed'i sit quintuplũ aduersus nuiꝰ quinta
plum d 2 4 8 s. 12 4 0 m'ta p 108 7 p 1 4 0 9 duades utrãq; m'tationũ p re
gulam 2 9 6 9 7 cum b. 9 habebis p'mũ nũm $\frac{1\,1\,1}{2\,7\,7}$ 2 2 sed'm $\frac{6\,9\,6}{7\,5\,9}$ 1 4 2
Rursus $\frac{1}{\mu}\frac{1}{2}$ ut diximus p'mi numi sit $\frac{1}{4}\frac{1}{\mu}$ sed'i. 9 multiplicatio d $\frac{1}{\mu}\frac{1}{2}$ p'mi
in $\frac{1}{4}\frac{1}{\mu}$ sed'i faciat additionẽ de $\frac{1}{\mu}\frac{1}{2}$ cum $\frac{1}{4}\frac{1}{\mu}$ sed'i adde 6 2 7 cũ 6 2 7 s. $\frac{1}{\mu}\frac{1}{2}$ d
108 cum $\frac{1}{4}\frac{1}{\mu}$ d 1 40 erũt 12 6 p que m'ta 108 7 1 40 9 duod utrãq; m'ta
tionũ p 2 9 6 9 7 cum b. 9 habeb' p'mum nũm $\frac{2}{7}$ 2 sed'm. $\frac{2}{5}$ 1 **De eodem**
Et si multiplicatio d $\frac{1}{\mu}\frac{1}{2}$ unius in $\frac{1}{4}\frac{1}{\mu}$ alt'us sit sexcuplum additionis de
$\frac{1}{\mu}\frac{1}{2}$ unius $\frac{1}{4}\frac{1}{\mu}$ alt'us sexcuplum de 12 6 m'ta b p 108 7 p 1 4 0 9 duades utrã
q̃ tationũ p 2 9 6 9 7 cum b 2 e quad potiꝰ. 9 habebis p'mum nũm

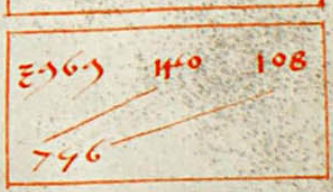


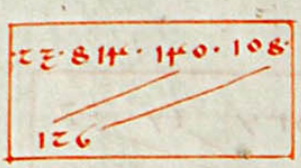












$\frac{5}{7}$ 20 secundum $\frac{2}{3}$ 26.

Et si ad illud de $\frac{1}{5}$ $\frac{1}{3}$ unius cum $\frac{1}{4}$ $\frac{1}{5}$ alterius sit septuplum multiplicationis de $\frac{1}{5}$ $\frac{1}{3}$ unius $\frac{1}{4}$ $\frac{1}{5}$ alterius multiplicationis de 126 in 108 et in 140 divides per septuplum de 3969 et [illegible] et habebis per primo numero $\frac{3}{7}$ $\frac{3}{7}$ per secundo $\frac{5}{7}$ $\frac{5}{7}$ **De duobus numeris reperendis qui sint ad invicem in data proportione**

23 · 814 · 140 · 108
126

Accepi $\frac{1}{6}$ $\frac{1}{4}$ unius numeri extra excedere $\frac{1}{5}$ $\frac{1}{3}$ alterius. et quod remansit multiplicavi per $\frac{1}{5}$ 9 [illegible] habui 100 dividesque 100 per $\frac{1}{5}$ 9 exibunt $\frac{30}{37}$ 10 Quare reperiendi duo numeri quorum $\frac{1}{5}$ $\frac{1}{3}$ unius excedant $\frac{1}{6}$ $\frac{1}{4}$ alterius in $\frac{30}{37}$ 10 pone per primo numero 30 et per secundo 25 extrahe $\frac{1}{6}$ $\frac{1}{4}$ de 30 s. 11 de $\frac{1}{5}$ $\frac{1}{3}$ de 25 s. de 15 remanent 3 que cum vellent esse $\frac{30}{37}$ 10 multiplicabis $\frac{30}{37}$ 10 per 30 et per 25 et divides utramque multiplicationem per 3 exibunt per primo numero $\frac{5}{37}$ 108 per secundo $\frac{18}{37}$ 86 ut habeas per primo numero 30 et super $\frac{1}{6}$ $\frac{1}{4}$ eorum adde $\frac{30}{37}$ 10 erunt $\frac{30}{37}$ 21 que sunt $\frac{1}{5}$ $\frac{1}{3}$ secundi numeri. Quare multiplica 12 per $\frac{30}{37}$ 21 et divide per 7 Et si vis sit secundus numerus 25 de quorum $\frac{1}{5}$ $\frac{1}{3}$ de me $\frac{30}{37}$ 10 remanebunt $\frac{7}{37}$ 3 que sunt $\frac{1}{6}$ $\frac{1}{4}$ primi numeri. Et si proponatur quod $\frac{2}{3}$ primi sint $\frac{3}{4}$ secundi. et ex ipsis proveniant supradicta. Invenies duos numeros quorum $\frac{2}{3}$ unius sint $\frac{3}{4}$ alterius erunt 9 et 10 quos multiplica per 30 ut que necessaria sunt habeantur integra erunt que per primo numero 270 per secundo 300 Extrahe ergo $\frac{1}{6}$ $\frac{1}{4}$ de 270 s. 99 de $\frac{1}{5}$ $\frac{1}{3}$ de 300 s. de 174 remanent 76 que cum velint esse $\frac{30}{37}$ 10 multiplicabis $\frac{30}{37}$ 10 per 270 et per 300 et divides utramque quamque multiplicationem per 76 exibunt per primo numero $\frac{1}{19}$ $\frac{15}{37}$ 38 per secundo $\frac{18}{19}$ $\frac{24}{37}$ 42 Et si vis ut multiplicatio residuorum se quod est inter $\frac{1}{6}$ $\frac{1}{4}$ primi numeri et $\frac{1}{5}$ $\frac{1}{3}$ secundi faciant unum ex ipsis duobus numeris qualemvis ut dicamus primum pones per ipso primo numero numerum habentem radicem cuius $\frac{1}{6}$ $\frac{1}{4}$ sint integre sicut 900 super $\frac{1}{6}$ $\frac{1}{4}$ quorum adde radicem eorum s. 30 erunt 360 quare invenias numerum cuius $\frac{1}{5}$ $\frac{1}{3}$ sit 360 s. multiplicatio inde 12 in 360 divides per 7 exibunt per secundo numero $\frac{1}{7}$ 617 Rursus si vis ut multiplicatio predicta residui in se faciat secundum numerum. pone ipsum secundum numerum esse 155 de quorum $\frac{1}{5}$ $\frac{1}{3}$ s. de 85 abice radicem eorum que est 12 remanebunt 72 Invenies ergo numerum cuius $\frac{1}{6}$ $\frac{1}{4}$ sint 72 erunt $\frac{5}{11}$ 196 per secundo numero. Item multiplicavi $\frac{1}{6}$ $\frac{1}{4}$ primi numeri per $\frac{1}{5}$ $\frac{1}{3}$ secundi et sint illud quod provenit 100 Invenias duos numeros qui in simul multiplicati faciant 100 sint 4 et 20 quare per primo numero habebis numerum cuius $\frac{1}{6}$ $\frac{1}{4}$ sunt 4 et per secundo habebis ipsum numerum cuius $\frac{1}{5}$ $\frac{1}{3}$ et $\frac{1}{5}$ sunt 20 Quare multiplica 30 per 4 et divide per 11 et 12 per 20 et divide per 7 et habebis primum numerum $\frac{7}{11}$ 13 secundum $\frac{2}{7}$ 35 Aliter quia [illegible] 10 in se proveniunt 100 invenies per primo numero numerum cuius $\frac{1}{4}$ $\frac{1}{6}$ sint 10 erunt $\frac{3}{11}$ 27 et per secundo invenias numerum eorum 10 sint $\frac{1}{5}$ $\frac{1}{3}$ erunt $\frac{1}{7}$ 17 et sic possumus infinitas questiones per regulas arborum solvere. **Incipit pars quarta duodecimi Capituli de inventione bursarum**

Duo hoñes qui habuer̃ dñios mueneruñ burgū unū dñioꝝ. qua inuenta
p̃mꝰ dixit sedo. Si hoc dñios burge ē dñiꝰ quod hēo hñem. hñem
utrq; ter tm q̄tu. Cui ꝯ alt̃ ḡdue ter tm ē. si ego hñem dñios burge
cū dñio meo. hñem quat̃ tm q̄ tu. Q̄uerunt̃ quor uniuſq; ho
nor. et quod ipi reperierũ in burgo. Notandū ē quōd q; q; cū p̃
tio hñs burgū hñt ter tm sedū. si ipe cū burgo hē 7 et sedē hē 1 g̃ mē
utriq; cū burgo hñto 1 et q̄b; p̃mꝰ cū burgo hē 1 7 g̃ hē 1/2 et 1/4 mē
dñioꝝ illoꝝ et burgo. Propt̃ eāde et sedē cū hac cū burgo quat̃ tm p̃
mo. eāde sūme 1/4 cū hīe nece ē. Q̄ re inuenias num̃ i quo reperiant 1/4 1/2
et q; 7 o pone. g̃ ut sūma dñioꝝ illoꝝ sit 7 o de q̄b; p̃mꝰ cū burgo hē 1/2
solid; 14 et sedē burgo hē 1/4 solid; 16 g̃ mē utriq; cū burgo hc oppu
tata hūt 21 Superfluū ū q̄ ē a 7 o usq; i 21 solid; 11 ē sūma dñioꝝ bur
ge. Ideo q; burgo oputata ē bis cū nō debeat oputari ñ tm semel. q;
oputatis burgis sunt semel magis q̄ debuñ. Vñ dcm superfluū qui ē a
7 o usq; i 21 unde; 11 sē semel id q; i burgo reperiũ sunt. Q̄ re cytules
11 de 14 remanēt 1 et tot hūt q; mē sedē. g̃ p̃mꝰ hē 1 et sedē 4
quib; addit; cū 11 de burgo faciunt 7 o ut pdcm sūma posuim.

Hinc q; p̃mꝰ ē burgo hē 1/2 cuī sūme dñioꝝ hoñ et burgo g̃ se hē
1/4 cuī sūme. Secūd; hē 1/4 cuī sūme hoñ et cū burgo hē 1/4 cuī sūme
accepe 1/4 de 7 o q̄ 1 et ptr hūc p̃mꝰ. Jā accepe 1/4 de 7 o q̄ 4 et ptr
hūc sedē g̃ mē utriq; hūt 7 a q̄b; usq; in 7 o remanēt 11 quī
reddit ut p̄dixim. Jā ulr. Pone p̃mū hīe ē q̄rtū hoñ et
p̃ burgo. q; hīe reperiūt dñioꝝ sedi. g̃ sedē hē ēdē ut ptr et burgo q;
ad hunc burgū. Hebit burgū ptr et burgo 7 illuq; ēdē ut ptr. q̄ hīe
reperiūt dñioꝝ p̃ti. cū sedē cū burgo hūt quod nō
ptr. Cytules g̃ ad unū 7 per ēdē ut ptr. remanebūt burgo 7 ea
q̄ ad unū. ut ptr. et hūt unū burgo 7 sedē. burgo 1
q̄ ad unū. ut ptr. et 4 hūt unū burgo 7 sedē. burgo 1
q̄ ad unū. ut ptr. et 11 ad unū. ut ptr. Vñ ū
burgo sedē dñioꝝ. burgo addit dñioꝝ p̃mo 11 ē ad 1 Vñ ū
burgo sedē dñioꝝ 11 p̃mꝰ hē 1 et q̄ omniū 4 et nō hē cū
p̃mo cū burgo hūt ut ptr. De burgo aarbi hoñ reptu.

Si unus hoñes dñioꝝ habens burgū dñioꝝ inuenerit q; p̃mꝰ dñioꝝ
terre. si daret ei burgū dñioꝝ cū sedē quot hīe hñem hñdum q;
burgo 1 sedē hñem. Ipse hīe 1 cū sedē hīe 1 cū burgo hūt ēdē ut burgo hūc
q; ad unū. ut ptr. et ut ptr. Q̄ re si reperiē 4 dñioꝝ p̃mi hñem burgo 1 sedē hñdum. g̃ si p̃mꝰ hē 1
cū burgo 1 hīe 1 secūd; hīe 1 q; p̃mꝰ hñem burgū hē 1/2 cuī sū
me hē cū burgo dñioꝝ 1 et sedē hē ēdē sūme hē 1/4
et ad hē 1/4 q; 1 et 1/4 1/2 1/4 usq; reperiant̃ usq; unde; i 60 ad utr

p̃mus de cū cētle 11 & 16 re
manēo 4 et tot hūt

p̃mꝰ
1
sedē
4
burgo.
11

ḡ ℥ de 60 que ſt̄ ℔ 0 et ℥ que ſt̄ ℔ 4 et ¼ que ſt̄ ℔ 8 7 adde ſimł. erūt
17 ℥ qui nūł magiſt̄ in integro. ſ. de 60 et hoc ꝯtigit ꝑ dīos burſe qui t̄
ꝙputant in p̄ſcptu ſūma. videł cū unoquoq; ꝑox. Et cū nō ſit ꝙputanda
n̄ tm̄ ſemel. mā oſtū t̄ q; ꝙputat bis plusq; debeat. ḡ illud ſuplūm qđ t̄
a 60 uſq; in 17 ℥ qđ t̄ 7 ℥ t̄ duplū dīoꝝ burſe. Et dūdenda ſt̄ 7 ℥
p 2 aut 60 p 2 mł̄canda. ℥ meli⁹ t̄ ut mł̄cet 60 p 2 q; dūdere 7 ℥
p 2 ideo q; 7 ℥ nō p̄t dūdi p 2 abſq; fractōe. aſcendit t̄ abſq; mł̄ca
tio de 2 in 60 in 120 que erūt ſūma cūctoꝝ dīoꝝ 7 burſe. Et 7 ℥
erūt p̄ q̄ntitate dīoꝝ burſe. Et q; ꝑm̄ ℥ totū ſūme cū burſa ap̄lcet
tr̄. ſ. de 120 ꝙm dīos 80 hīc nō dubitat̄. de quibꝫ ertractis dīis bur
ſe. ſ. 7 ℥ remanēt 7 et tot hūit ꝑm̄. hīc accipe ℥ de 120 erūt 90
de q̄b⁹ ertrahe 7 ℥ remanēt 17 et tot hūit ālt̄. ſ. urſ̄ ſūme ¼ de
120 q̄ ſūt 96 et ertrahe ī 7 ℥ remanēt 2 ℥ et tot hūit t̄cī.
Hīc q; ꝑm̄ cū burſa hī ℥ totū ſūme. reliq̄ duob⁹ ½ eīdē ſūme re
manāt neccē. Item cū ſcōt cū burſa ℥ tr̄ ſūme detinent reliq̄
¼ eīdē ſūme remanāt ſi dubitat̄. ſ. urſ̄ cū t̄cī hō hāt ¼ et reliq̄
hūit ¼ Et ſuciend̄ t̄ nūł ī quo repiant ¼ ¼ ½ hoc t̄ 60
pone ḡ ut ſūma dīoꝝ tum hoīm̄ 7 burſe ſit 60 quoꝝ ½ ſ. 20
hūit inē ſcōm 7 t̄cūl. Et ½ ſcilicz 14 hūit inē t̄cūm 7 ꝑmūm. Et ¼ eīdē
ſūme. ſ. 12 hūit inē ꝑm̄ 7 ſm̄. 7 ſic unoquoq; bis ꝙputato. hūit inē
oēs dīos ℔ 7 Et ſit ſūma ꝑox 7 burſe duplū de 60 et eoꝝ
ſūma erit ℔ 7 Et q; ſcōt 7 t̄cī hō hūit ½ et ꝙm ſ 120 ſcilz ℔ 0 et inē oēs
hūit ℔ 7 reſiduū q; t̄ ad ī ℔ 7 ſcilz 7 hīt ꝑm̄ hō. videł ſi auferat ¼
et ¼ de 120 a ℔ 7 remanebūt 17 ꝑ dīſt ſcōm. et ℥ ꝑ dīſt
t̄cī ut ſupi⁹ iuenim̄. Nā addat⁹ 7 et 17 et ℥ reddūt ℔ 7 ut ꝑ
eoꝝ ſūma iuenim̄. De burſa cū ī ipa repiat⁹ aliqua d̄ nōia q̄tus
am ſi dicāt⁹ q; in burſa inuenta ſit aliqua q̄ntitas dīoꝝ q̄ntum ut
dicam⁹ ℥ q; dīcī burſe inuenti ſt̄ t̄ 7 ℥ quos t̄ ut ſ 7 ℥ pone ℥
ſub 7 ℥ ſ. burſa ſub burſa. 7 ꝑ 7 ℥ ꝓt dīos t̄ hoīm̄ ut ī manifſto
cernit̄ et multiplicabis ℥ ſ. burſa p 7 de burſa 7 divide p 7 ℥ 7 hebis
dīos ꝑm̄. hīc mł̄ca 17 p ℥ et divide p 7 ℥ et hebis dīos ſcōi.
ſ. urſ̄ mł̄ci p ℥ et divide p 7 ℥ 7 hebis dīos t̄cī. hoīm̄
Et ſi ꝓponat⁹ hoīes t̄ ℔ et ꝑm̄ | De burſa aquatioꝝ hoīb⁹ ī uen
habita burſa ꝓponat hīc ter tm̄ reliq̄. ſcōt quat tm̄. t̄cī q̄nq; tm̄.
et q̄rto hīta videł burſa ſer tm̄ reliq̄. hīc affirmet p ſuprioꝝ regłm
iuenīet q; ꝑm̄ cū burſa hī ℥ totū ſūme 7 reliq̄ remanz ℔ 7 ſcōt hī ¼
7 reliq̄ remanz ¼ et t̄cī hī ⅓ 7 reliq̄ remanz ⅙ 7 q̄rto hī cū eāde burſa
⅙ 7 alīſ remanz ⅐ Vñ ſm̄ ꝑme regłe cōſideratiōē uidend̄ t̄ de
⅙ ⅓ ¼ ½ ī quo repiant nūł. ſ. ī 120 q; ꝓt p ſūma dīoꝝ ꝑox et

ꝑm̄
7
ſcōt
17
t̄cī
℥
burſa.
7 ℥

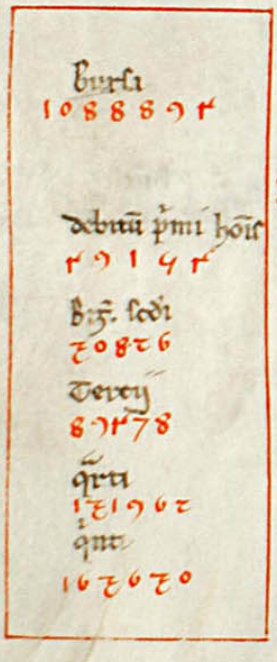
burſa. t̄cī. ſcōt. ꝑm̄.
7 ℥ ℥ 17 7
℥ ℥

burse. de quib⁹ acc. 3/4 .s. £14 et 5/4 que sē £26 et 4/6 que sē £40 et 6/7 que sē £60 Et adde insim' erūt 1£61 de quib⁹ ertuhe £20 remanēt 9£1 Et q̄ hoīes sē £ 7 sēp cū unoquoq; pōr gputat burs. g̃ burs gputat quat in p̄cepto 1£61 cū nō sit n̄ semel gputanda. g̃ gputat t̄ tpli q̄ debeat. Vñ mlca £20 p £ erūt 1£60 q̄ sūt sūma dr̄iorū. nūj. hoīnū 7 burse 7 9£1 erūt dr̄ij burse. accipe g̃ 3/4 de 1£60 erūt 9£47 tot hē p̄m̄ hō cū burs. de quo accipe 3/4 que sūt 9£47 ertuhe īñ 9£1 remanēt £ 7 tīn hūit p̄m̄. Jtē acc. 1/4 de 1£60 q̄ sūt 1008 et ertuhe īñ 9£1 remanēt 67 7 tot hūit alt̄. s. burs ertuhe 4/6 de 1£60 que sē 1040 ertuhe īñ 9£1 remanēt 109 7 tot hūit tcī. Et adhuc accipe 6/7 de 1£60 q̄ sē 1080 et ertuhe īñ 9£1 remanēt 1£9 7 tot hūit q̄rt̄. Illud īdē repies si fecerit s. alīā regl̄am uidet ut 1/2 1/6 1/4 1/7 q̄ remet rēmēt tb; hoīb; p ordinē accipiat de £20 erūt £19 q̄ sūt sūma dr̄ior nūj. hoīnū. quā ertuhe de 1£60 supī repta remanēt 9£1 que sūt burs. Et accipe quartā de 1£60 que ē £14 et ertuhe de £19 rēmēt £ et tot hūit p̄m̄. Jtē accipe 1/7 de 1£60 que ē £47 ertuhe de £19 remanēt 67 et tot hūit sēc̄. Jtē sume 1/6 de 1£60 que ē £10 7 ertuhe de £19 remanēt 109 7 tot hūit tcī. s. burs sume 1/7 de 1£60 7 ertuhe de £19 rēmēt 1£9 7 tot hūit q̄rt̄. ut supī p p̄mā regulā īuenīsti. De burs aquunq; hominib; repta

Ē si ꝓponat q̄ hoīes sunt 4 et p̄m̄ hītā burs ꝓponat se hīe bis tīn 7 dimi duū rehq̄s. Et ad si hūit burs ꝓponat se hīe t tīn 7 tcīā rehq̄s. sc̄i q; q̄ tīn 7 q̄rtā. q̄rt̄ ii q̄nq̄es tīn 7 q̄ntā. q̄nt̄ ad ē eade burs sextes tīn 7 ½ sex cū hīe affirmat. Sed m s; stam mat̄ cū p̄m̄ cū burs hāt bis tīn 7 di midiū rehq̄s. g̃ si ipse cū burs hūit 1/2 t et oēs rehq̄ hēbt 1 g̃ si ipse hūit 4 7 reliqui hēbt t g̃ ind oēs 7 de quib⁹ cū p̄m̄ ē burs hāt 4 nūmerū 5/7 totī sūme inde ipm 7 burs hīe demōstrat. Q.d. rehq̄s. nūj. hoīb; 2/7 eidē sūme remañe ī dubitat. Eadē ratiōe si de sēc̄o hoīe ꝓsperis ipm cū burs 10/12 totī sūme hīe 7 rehq̄s 2/12 rema nere repiet. Q.d. īdē si de tcīo cerneris ipm. cū burs 17/21 totī sūme hīe. 7 rehq̄s 4/21 eidē sūme remañe cognosces. Et si de q̄rto inspexeris ipm cū burs hīe 26/21 7 rehq̄s 5/21 remañe nō dubitabis. Ita si eodē m̄ de quo hoīe inspicē ꝓcreueris ipm ē burs 37/42 totī sūme hīe. 7 rehq̄s nūj. hoīb; 6/42 eidē sūme remañe īuenies. Q.d. uidendo ē de 37/42 26/21 17/21 10/12 5/7 quo mō repiant. Q.d si sm mrm magisteriū. s. mūt figūt īuenire uoluīt. mlca. 7 que sē sub 4 per 1£ erūt 91 que ē debent mlcari rep t relinque 7 q̄ sūt ī regl̄a de t ꝓ ipa 7 que m̄ mlcasti p. 1£ et mlcabis 91 p £ que remanēt ī regl̄a de t erūt t 7£

Burs.
9£1
p̄m̄
£
sēc̄
67
tcī
109
q̄rt̄
1£9

7 hūit



q̄ p̄ 31 7 p̄ 45 erunt 363909 de quib' accipe 5/7 et 10/13 et 17/21 et 26/31 et 37/45 Quas si iterum magistrum secundum cadem artem accipere uolueris describe minuta prescripta per ordinem sic

31 31 31	305214	294593	279930	259935
37/45	26/31	17/21	10/13	5/7

et multiplica 5 que sunt super 7 per 13 erunt 65 que multiplica tantum per 3 que sunt in regula de 21 quia non oportet repetere 7 que sunt in regula de 21 propter ipsa 7 que sunt sub 5 a quibus incepisti modo multiplicare et sic 65 per 3 multiplicata redditur 195 que per 31 et per 45 erunt 259935 que sunt 5/7 ipsius prescripti numeri que ponantur super 5/7 sicuti superius continentur esse descripti. Item multiplica 10 que sunt sub 13 per 21 que per 31 et per 45 erunt 279930 que relinquuntur ut non multiplicentur per 7 que sunt sub 5 propter ipsa 7 que sunt in regula de 21 et describuntur 279930 super 10/13 Rursus multiplica 17 que sunt sub 21 per 31 et per 45 et per 13 Et relinquitur quod non multiplicabuntur per 7 que sunt sub 5 erunt 294593 que pone super 17/21 Item multiplica 26 que sunt super 31 per 45 et per 21 et per 13 erunt 305214 que pone super 26/31 Adhuc multiplica 37 que sunt sub 45 per 31 et per 21 et per 13 erunt 31 31 31 que pone super 37/45 et adde 259935 cum 279930 et cum 294593 et cum 305214 et cum 31 31 31 erunt 1454280 de quibus extrahe 363909 remanent 1088894 que sunt quantitas dominorum bursae. Et quia homines sunt 5 bursa [illegible] quod magis quam oportet. Quia multiplicanda sunt 363909 per 4 erunt 1455636 que sunt summa bursae et dominorum quinque hominum. Et quia primus habet 5/7 totius summae accipe 5/7 de 1455636 que sunt 1039740 et tot habent inter primum et bursam. Et quia superius magis in bursa reperitur est quam [illegible] bursam et primum [illegible] solubilis erit. Aut primus homo debitum habet illud uidelicet quod dicitur a summa dominorum ipsius et bursae ad usque ad summam dominorum bursae [illegible] 1039740 usque in 1088894 quod est 49154 Item accipe 10/13 de 1455636 que sunt 1119720 et tot habent inter secundum hominem et bursam. De quibus extractis dominis bursae 1088894 remanent 30826 et tot habent secundus. Item accipe 17/21 de 1455636 que sunt 1178372 de quibus extrahe dominos bursae remanent 89478 et tot habent tertius. Rursus accipe 26/31 de 1455636 que sunt 1220856 de quibus extrahe dominos bursae 1088894 remanent 131962 et tot habent quartus. Et adhuc accipe 37/45 de 1455636 que sunt 1252524 de quibus extrahe 1088894 remanent 163630 et tot habent quintus.

Modus alius ad inuentionem bursae in tertio homine

Tres homines dominos habentes bursam dominorum [illegible] primus [illegible] secundo [illegible] habentem dominos bursae [illegible] duplo [illegible] habent bursam [illegible] in triplo. Tertius [illegible] bursam [illegible] quatuor [illegible] in bursa reperiuntur et quot utrumque habet. Primus duplo dicitur 1/2 ideo quia dominorum secundi sunt 1/2 dominorum primi et bursae. Cum primus de bursa habet duplum eius et de triplo.

bursa
1088894

debitum primi hominis
49154

Bis. secundi
30826

Tercii
89478

quarti
131962

quinti
163630

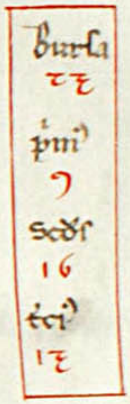
91

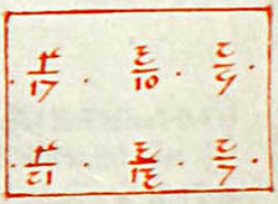
$\frac{1}{2}$ 7 de quadruplo $\frac{1}{4}$ 7 describe ī ordīnē sic $\frac{1}{4}$ $\frac{1}{2}$ 1 7 mlca 2 p 2 erūt 6 que p 4 erūt 2 4 de qb⁹ ernahe mlcationē de 1 q9 ē sp 2 ī 1 q9 ē sup 2 ducta in 1 q9 ē sup 4 que mlcatō fīt ascendat ī 1 remanēt 2 2 7 vor dris inuenti sc̄i ī bursa. Post hec descende $\frac{1}{2}$ ī $\frac{1}{2}$ q9 sedt hr $\frac{1}{2}$ sūme drior fuor 7 p̄mi 7 burse. Et ex eis tce descende $\frac{1}{2}$ ī $\frac{1}{4}$ et $\frac{1}{4}$ ī $\frac{1}{4}$ et pone cal ex pte sic $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{2}$ et mlca 2 p 4 7 p 4 erūt 60 quib⁹ sup adde 1 q9 erist et mlcatōe de 1 q9 ē sup 2 ī 1 q9 ē sup 4 qua ī 1 q9 ē sup 4 de eisde 2 remanēt 2 que mlca p 4 erūt 80 quib⁹ sup adde mlcatōes de 1 q9 ē sup 2 ī 1 q9 ē sup 4 erūt 9 que mlca p 1 q9 ē sup 4 erūt 9 7 vor hui⁹ p̄mi. Ista ernahe 1 q9 ē sup 4 de eisde 4 remanēt 2 que mlca p 4 7 adde mlcatōes de 1 q9 ē sup 4 ī uno q9 ē sc̄i 4 erūt 16 q̄ mlca p 1 q9 ē sc̄i 2 7 erūt 16 7 vor hui⁹ alt. Istīm ernahe 1 q9 ē sc̄i 4 de 4 remanēt 4 que mlca p 2 erūt 12 7 mlca 1 q9 ē sc̄i 4 p 1 q9 ē sc̄i 2 et adde eī 12 erūt 12 que mlca p 1 q9 ē sc̄i 4 erūt sibi 12 7 vor hui⁹ tcī. ¶ Potes ē p̄mū drior uniculq; reperire. pones $\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}{2}$ ī ordinē ut sup 7 de sīs 2 4 reme q̄rtū. s. 6 eī qb⁹ iuge 6 iuge tcū p̄ma. s. 2 erūt 8 sup que 8 adde dimidiū de 2 que m̄ addita eī 6 erūt 9 et vor hr̄ p̄mi. eī quib⁹ 9 adde burse. s. 2 2 erūt 22 quor drior. s. 16 hr̄ sedt. eī quib⁹ addita burse erūt 2 9 quor tcia pte hr̄ tci. De bursa ī ter hoīes inuenta sedēs istīm modum

Vel ī ppones q. 4 mus dior hui⁹ burse hr̄e bis tm 7 dimidiū sedo. et sedt ter tm 7 sedi tcio. et tci hr̄e quat tm 7 q̄rtū p̄mi. et ita p̄mi hui⁹ burse hr̄ bis tm 7 dimidiū sedo. q̄ ii p̄mi hr̄ tc̄ $\frac{2}{7}$ 2 7 sedt hr̄ 1 q̄ ii p̄mi hr̄ 4 et sedt hr̄ 2 q̄ sedt hr̄ $\frac{2}{7}$ p̄mi 7 burse 7 hr̄ $\frac{2}{7}$ sui 7 p̄mi 7 burse. pone q̄ $\frac{2}{7}$ ī una p̄tē et $\frac{2}{7}$ alia. Ista q; sedt hui⁹ burse hr̄ ē tm 7 tcia tcio. q̄ ii tcī hr̄ 10 7 tci hr̄ 2 q̄ tci hr̄ $\frac{2}{10}$ sedi 7 burse 7 hr̄ $\frac{2}{17}$ sui 7 sedi 7 burse. pone $\frac{2}{10}$ eī $\frac{2}{7}$ sup inuenti et $\frac{2}{17}$ p̄te eī $\frac{2}{7}$ Ista q; tci hui⁹ burse hr̄ quat tm 7 q̄rtū p̄mi hr̄ $\frac{4}{17}$ tci 7 burse 7 hr̄ $\frac{4}{21}$ sui 7 tci 7 burse. pone $\frac{4}{17}$ eī $\frac{2}{10}$ $\frac{2}{7}$ et $\frac{4}{21}$ eī $\frac{2}{17}$ $\frac{2}{7}$ ī margie ostēdit 7 quare ut s.

Tel hoīes hui⁹ drior fuerūt burse dispones p̄mū eī burse ernahe sue ī duplo sedi tcii ī tplo tci p̄mū ī quadruplo de ne quor ut sup 7 q̄ reperiūt ī bursa. p duplo pone $\frac{1}{2}$ quia hr̄ sedt et erist p̄mi 7 burse. et p tplo pone $\frac{1}{3}$ quia p̄ hr̄ tci et erist sedi 7 burse. et p quadruplo pone $\frac{1}{4}$ q̄ $\frac{1}{2}$ $\frac{1}{2}$ sic $\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{4}$ quia q̄rtū p̄mi hr̄ hr̄ et erist tci hoīs 7 burse. semī mlca 2 p 2 que 4 2 4 de quib⁹ tolle 1 q9 ōnē et mlcatōe de 1 q9 ē sc̄i 2 1 q9 ē sup 4 remanebit 2 2 q9 erist burse dei

erūt 61 q̄ sc̄i sūma drior tci hoīm 7 burse. Post h̄ ernahe 1 q9 ē sup 2





6 cū q̄lb⁹ adde tcīa eor̄.s. z erunt 8 cū q̄lb⁹ adde ½ qrt̄ or̄.s. 1 et tot dr̄ios hr̄ p̄mi. q̄r adde cū dr̄ijs burse.s. cū z erūt 7z quor̄ ½ .s. dr̄ios 16 hr̄ sedis. cū q̄lbz addita bursa erūt 7 9 quor̄ ½ .s. 17 hr̄ tcī.

Hui⁹ pōitis ¼ ½ ½ mlca 1 qd̄ē sīr ꝑ z que sī sub unyta que ꝑ z q̄ erūt 6 9 hoc̄ accipe q̄rtā de z ꝑ Jt̄ 1 qd̄ē sīr ꝑ q ꝑ 1z que sī sb ūgta erūt z que sī ½ quā accepim⁹ sup̄ de 6 que fuerūt ¼ de z ꝑ Rursꝰ mlca 1 qd̄ē sup ꝑ ꝑ 1 qd̄ē sīr z q ꝑ 1 q ē sup z erit 1 et hoc̄ accipe ½ de z q̄ fuerūt ½ de 6 adde ḡ 6 et z et 1 erūt 9 .s. dr̄ij p̄mi hoīs. Possum⁹ 9 hoc ꝑmū ūtare uidelz 1 q ē sīr ꝑ mlca ꝑ z et sup̄adde mltiplicatōnē eid̄ē 1 in 1 q ē sīr z hoc̄ mlca 1 qd̄ ē sīr ꝑ ꝑ z et adde 1 erūt ꝑ q̄ mlca ꝑ z que sī sb ūgta erūt 8 quib⁹ adde mltatōez de 1 qd̄ē sīr ꝑ in 1 qd̄ē sīr z ducta in 1 q ē sīr z erūt sīlr 9 deīn ut sedm hui⁹ modū ūtat dr̄ios alios redige ½ ad simām sic ½ ¼ ½ et mlca 1 qd̄ē sīr z ꝑ 4 .s. ꝑ guidōnē de ꝑ cū 1 q ē sup ipa ꝑ erūt 4 que mlca ꝑ z erūt 14 quib⁹ sup̄adde 1 qd ꝓuenit et ducto 1 qd̄ē sīr z 1. 1 q ē sīr ꝑ q q̄ ē sup z erūt 16 ut ꝑ dr̄ijs sedi hr̄ ūuenim⁹. Vl acc̄. ½ de z ꝑ et ¼ tpi medietatis et ½ tpi q̄rte. et habes silr 1 6 Jt̄ redige ½ ab alio capite sic ½ ½ ¼ et fac ut fecisti i ūuenc̄ dr̄ios reliquos hoīnū et habebis 17 ꝑ dr̄ijs tcij hoīs.

Et si p̄mꝰ cū burla excedat sedm ī duplo 7 ī dimidio cl̄. et sedꝰ cū burla excedat tcīū hoīem ī triplo 7 ī tcia cl̄. et tcī⁹ hō cū burla excedat p̄mū in q̄druplo et cl̄ q̄rta. Q̄ra cū p̄mꝰ cū burla excedit sm ī duplo cl̄ 7 dimidio. ḡ si sedꝰ p̄mꝰ cū burla hr̄ ½ z sedꝰ quidē hr̄ 1 q̄r si p̄mꝰ c burla hr̄ duplū de ½ z .s. 4 sedꝰ hebit z ḡ dr̄ij si sūt ⅝ dr̄ios p̄mi et burle. Ponet ī ordine ¼ 1/10 ⅝ et mlcabis 4 ꝑ 10 que ꝑ 17 erūt 840 et z ꝑ z que ꝑ ¼ erūt z ¼ que extrahes de 840 remanēt 826 ꝑ dr̄ijs burse. p̄ hoc mlca ꝑ ¼ ꝑ 10 et ꝑ z hoc c ꝑ 17 ī una mltatōe erūt 4z q̄ mlca ꝑ 4 et adde mltatōem de ¼ in z ducta in z et erūt 8 ¼ et tot hūit p̄mꝰ. deīn redige ⅝ ꝑ 1/17 sic ⅝ 1/17 1/10 et mlca z ꝑ z 1 .s. ꝑ guidōnē de 17 cū ¼ erūt ¼ z q̄ mlca ꝑ 10 erūt de z ¼ .s. bis. ¼ z ꝑ z et ¼ et z que sī sīr ūgal erūt ¼ ¼ ¼ et tot hūit sedꝰ. Vl acc̄. ⅝ de dr̄ijs p̄mi 7 burse. deīn redige 1/10 ꝑ ⅝ sic. 1/10 ⅝ 1/17 et opare ut p̄. sup̄. et habes z 81 ꝑ dr̄ijs tcij hoīs. Vl de dr̄ijs sedi 7 burse accipe 1/10

Si tcī hoīes sūt. uij. et dr̄ij p̄mi 7 burse sunt duplū dr̄ios sedi. dr̄ij q̄ sedi 7 burse sunt triplū dr̄ios tcij hoīs. dr̄ij aī tcij hoīs et burse sūt q̄rtū plū dr̄ios q̄rti hoīs. dr̄ij quidē q̄rti hoīs 7 burse sūt q̄nc̄uplū dr̄ios p̄mi. q. p̄mꝰ cū burla excedit sm ī duplo erūt dr̄ij sedi hoīs ½ dr̄ios p̄mi et burse. Silr ex hijs que posita sī dr̄ij tcij hoīs sūt ½ dr̄ios sedi

Silr ī tcīes tcīū hoīe hr̄e 1/10 dr̄ios sedi et b̄se. Se p̄mū hr̄e ⅝ dr̄ios tcīū hoīs et b̄se.

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7 burse. Et dr̃ij q̃rtu hoĩ sr̃ ½ dr̃iox̃ tcij hoĩ et burse. Tam 7 dr̃ij p̃mi hoĩ sr̃ ¼ dr̃iox̃ q̃rtu hoĩ et burse. Q. r̃ p̃de i ordine ¼ ½ ½ et mlca nũor q̃ sr̃ sb ugal in se erũt 12 o de q̃b tolle 1 qd̃ pueit et mlcande unitatũ que sr̃ ugal in se erũt 11 9 p dr̃ijs burse. Post hoc acc̃. ¼ de 12 o erũt 2 ½ de q̃b acc̃. ½ erũt 6 de q̃bz acc̃. ½ erũt 2 de quib accipe ½ erũt quor. uij. nũor insimul ũge. reddẽt 2 2 p dr̃ijs p̃mi hoĩ. Vl mlca 1 q̃ sr̃ 4 p 1 q̃p 2 q̃p 2 erũt 2 ½ q ide ẽ accipe q̃tũ de dẽis. 12 o. Burs 1 q̃ sr̃ 4 p 1 qd̃ sr̃ ½ qd̃ p 1 q̃ sr̃ 2 qd̃ p 2 erũt 2 qd̃ ide ẽ accipe ½ de dẽis 6 Et adhuc 1 q̃ sr̃ 4 p 1 qd̃ sr̃ ½ q p 1 qd̃ sr̃ 2 q p 1 q̃ sr̃ 2 et eĩ qd̃ ide ẽ accipe ½ de dẽis que fue rũt ½ de 6 addẽ eĩ 6 et eĩ 2 et eĩ 1 erũt sũl 2 2 q̃ potes p mtũ re pue uideꝫ mlca 1 q̃ sr̃ 4 p ½ et adde mlticandem eide 1 in 1 qd̃ sr̃ ½ Et hoc ẽ sic mlcare 1 qd̃ sr̃ 4 in ½ et in 1 .s.i 4 i una mltiplica tione erũt 4 que mlca p 2 et adde mltplicandem de 1 qd̃ sr̃ 4 in 1 q̃ sr̃ ½ q̃ 1 q̃ sr̃ 2 erũt 16 que mlca p 2 et adde mltplicandẽ .uij. unitatũ que sr̃ sr̃ ugal erũt sũl 2 2 dein redige ½ i capite linee ruptor sic ½ ¼ ½ ½ et opaberis eĩ rupt̃ icipiendo a ½ sicut sup̃ fe cim icipiendo a ¼ uideꝫ accipies ½ de 12 o .s. 6 o de quibz accipies ¼ uideꝫ 12 de q̃bz accipe ½ uideꝫ 1 et ũge ĩsim̃l erũt 7 6 et tot hr̃ sr̃. Vl alr dror p̃mi .s. 2 2 eĩ dr̃ijs burse ũge .s. eĩ 11 9 erũt 1 42 quor medie tate .s. 7 6 hr̃ sr̃. Burs p̃de ½ i p̃ncipio linee sic ½ ½ ¼ ½ et opaberis ut s. icipiendo a ½ de 12 o et habebis 6 4 p dr̃ijs tcij hoĩ ul̃ et dr̃ijs si et burse. accipe tcia p̃de. sim pone in p̃ncipio linee ½ sic ½ ½ ½ ¼ et iueies dror q̃rtu ordie sic ẽ ½ 6 qui sr̃ q̃rtu de dr̃ijs tcie et burse. p̃edit ẽ sca iuentio dror p̃mi et burse et p̃portõe qua hr̃t adiuice que p̃portio iueit sic. Q. in p̃mi eĩ burla hr̃ bis tin q̃ sedi. mediet p̃mi et burse ẽ q̃tũ dr̃ sedi. Secm hãc cõsilem cõsiderationẽ iueies ½ dr̃iox̃ si et burse ẽ q̃ntũ dr̃ij tcij hoĩ et ¼ dror tcij hoĩ 7 burse ẽ q̃tũ dr̃ij p̃mi hoĩ. Et q̃m medietas dr̃iox̃ p̃mi et burse ẽ q̃tũ dr̃ij si. Tercia pt̃ mediet dr̃iox̃ p̃mi et burse .s. ⅙ cox̃ sr̃ ½ dr̃iox̃ si. Coit adiũgat ½ burse erũt ⅙ dr̃iox̃ p̃mi eĩ ⅙ et ½ .s. eĩ ½ burse q̃tũ ½ dror sedi eĩ ½ dr̃iox̃ burse sr̃ q̃ntũ dr̃ij tcij hoĩ. Q. r̃ ⅙ dr̃iox̃ p̃mi eĩ ½ dr̃iox̃ burse sr̃ q̃tũ dr̃ij tcij hoĩ. Q. r̃ ¼ terte pt̃es dr̃iox̃ p̃mi .s. 2/12 eĩ ¼ medietas burse uideꝫ ⅛ sr̃ q̃tũ q̃rtu dr̃iox̃ tcij hoĩ. Coit adiũgat ¼ dr̃iox̃ burse erũt 2/12 dr̃iox̃ p̃mi eĩ ⅛ et 1/12 .s. eĩ 2/8 dr̃iox̃ burse q̃tũ ¼ dr̃iox̃ tcij eĩ ¼ dr̃iox̃ burse que ¼ dr̃iox̃ tcij et burse sr̃ q̃ntũ dr̃ij q̃rtu hoĩ. Sz 2/12 drox̃ p̃mi eĩ 2/8 dr̃iox̃ burse sr̃ q̃ntũ del q̃rtu hoĩ. Q. r̃ ¼ de 2/12 .s. 1/20 dr̃iox̃ p̃mi eĩ ¼ de 2/8 uideꝫ eĩ 2/20 dr̃iox̃ burse sr̃ q̃ntũ ¼ dr̃iox̃ q̃rtu. Coit adiungat ¼ dr̃iox̃ burse erũt 1/20 dr̃iox̃ p̃mi eĩ 2/20 et ¼ uideꝫ eĩ 11/20 dr̃iox̃

Jt mlcab 1 q̃ sr̃ 4 p 1 q̃ sr̃ ½ qd̃ p 2 q̃ p 2 erũt 6 q ide ẽ accipe q̃tũ de dẽis 12.

.s. 2 de q̃bz accipe ½

q ½ dr̃iox̃ si eĩ ½ dr̃iox̃ bis

q̃rtu hoĩ et ¼ dr̃iox̃ q̃rtu et burse ẽ q̃tũ dr̃ij

xate q̄ se boem̄ ex diuide 119 er ꝛꝛ ꝑ 120 er inbūr 119/120 er 11/120 Tūc inueniat
duos nūos ex quib⁹ 119/120 unū sit ꝛ ꝑū 11/120 alt⁹ s. nūs ꝛ que sunt si hujꝰ.
q̄ duos nūos si inuenīs in integrū d⁹os hoīm̄ ex burlag q̄ e in integrū requisit // vel in integr̄
sic ꝑce uc ꝑm̄ nūs sit 120 de quib⁹ 119/120 s. de 119 extrahe ꝛ remanet 116
de q̄b⁹ q̄rtā ex si sit 11/120 alt⁹ nūs integ⁹ que cū nō sit ꝑ 116 q̄ e nō diuidit integ⁹
hē ꝑ 11 que sit si 120 ꝑ 116 sit 11/120 ex nūo qui erit ex mīcōe de 120 in 116
duc̄a ꝑ 11 ꝑ ꝑce ꝑ ꝑmo duplū de 120 ut̄ triplū ut ā q̄ libꝫ multiplex ex q̄b⁹ 119/120
extracat ꝛ sit remanear nūs qui diuidat integrū ꝑ 11 ꝑ ꝑce ꝑ 120
s. quadruplū de 120 quor 119/120 sunt quadrupla de 119 s. 476 de q̄b⁹ extracis ꝛ
remanēt 477 quor 1/11 s. mīa ꝑ 120 erit 1720 qui ē alt⁹ nūs. g⁹ ꝑm̄ hē 480
erit ꝑma burla capiend⁹ 1720 ꝑ ꝑce ꝑ fca fuerit 1722 in ḡra 1727 in q̄rta 1733
cū q̄b⁹ burlis ex cū dr̄is ꝑmi inueniet sm̄ hoīem hr̄e 1100 cū 9 s 1 q̄rū 667
Procedit ē hec regla ex inuēcōe ꝓpoīois qua hēt dr̄is ꝑmi ad d⁹os ꝑme bur-
le sic. ꝑma ꝑm̄ ē q̄rta burla hō bis tm̄ q̄ tocī. medietat dr̄is ꝑmi / ꝑme
burle sc̄ q̄rtū dr̄is tocī. scd̄ inueniet 1/2 dr̄is ꝑmi ex se burle cū q̄rtū dr̄is tocī
hoīm. ex 1/4 tocī / tocie burle cū q̄rtū dr̄is q̄rtū tocī q̄m ꝑmi 1/2 ꝑmi ex ꝑme // et 1/4 q̄rtū hoīs ex q̄b⁹ burle cū q̄rtū dr̄i
burle ē q̄ dr̄is ꝑmi 1/2 medietat⁹ ꝑmi / ꝑce burle ē q̄ 1/2 dr̄is ꝑmi. cōtrad ad ꝑmu
dat 1/2 se burle que ē dr̄is 1 ꝑb⁹ tocī ꝑce ꝑce burle q̄ 1 ē illud q̄ hūmōi si
perd⁹ cū accepim⁹ 1/2 ꝛc ꝛꝛ q̄ sit si 1/2 ꝛ q̄ ex ē 1/6 dr̄is ꝑmi cū 1/6 ex 1/2
s. 1/2 ꝑce burle ex cū dr̄is 1 q̄ ē 1/2 si ex se burle. ꝑ ~~si ex se~~ 1/2 si / se bur
le ē q̄ si dr̄is tocī hoīm. ꝑ 1/6 dr̄is ꝑmi cū 1/2 ꝑme burle / cū dr̄is 1 si q̄
si tocī hoīs. ꝑ 1/12 de 1/6 s. 1/12 dr̄is ꝑmi ex 1/12 de 1/2 s. 1/8 ꝑme
burle cū 1/12 unū dr̄is si q̄rtū dr̄is tocī hoīm. q̄ cōtrad⁹ 1/12 tocie bur le
que ē dr̄is 1/12 1 ꝑb⁹ q̄rta ꝑce ꝑce burle cū 1/12 ꝑmi ex 1/8 ex 1/12 s. 1/8 ꝑce burle
cū 1/12 unū cū ex cū de dr̄is 1/12 1 s. cū dr̄is ꝛ erit q̄rta ꝑce 1/12 tocī hoīs /
tocie burle. ꝑ 1/12 tocī hoīs / tocie burle ē q̄rtū si dr̄is q̄rtū hoīs. g⁹ 1/12 dr̄is
ꝑmi ex 1/8 ꝑce burle cū dr̄is ꝛ si q̄rtū dr̄is tocī hoīm. cōtrad⁹ ꝑ 1/8 ꝑce burle
cū 1/12 unū cū ex cū de dr̄is 1/8 1 s. cū dr̄is ꝛ erit q̄rta ꝑce 1/8 tocī hoīs /
ꝑce hūmōi sup̄ cū accepim⁹ 1/8 de 818 hūmōi ex ḡra ꝑce 1 q̄ sunt 1/2 de
ꝛ cū / in quib⁹ tota burle ꝑcedit ꝑmū. ē q̄ 1/12 ꝑmi —— ex 1/8 ꝑce bur
le cū dr̄is ꝛ si q̄rtū dr̄is q̄rtū hoīs cū 1/4 de 1/8 1/12 1/120 dr̄is ꝑmi cū 1/4 de 1/8
s. cū 1/120 ꝑme burle ex cū 1/4 de dr̄is ꝛ s. cū 1/4 unū dr̄is q̄rtū 1/4 de dr̄is
q̄rtū hoīs. cōtrad⁹ ad 1/4 q̄rte burle / cū 1/120 ꝑmi ex 1/4 ex 1/4 burle ex // q̄ ē 1/4 de dr̄is ꝛ s. 1/4 ꝛ pl⁹ 1/4
1/4 unū dr̄ ex dr̄ 1/4 ꝛ erit q̄rtū 1/4 dr̄is q̄rtū / q̄rte burle. ꝑ 1/4 dr̄is ꝑme būle
q̄rtū hoīs. q̄rte burle ē q̄rtū dr̄is ꝑmi g⁹ 1/120 dr̄is ꝑmi ex 11/120 ꝑce burle cū
dr̄is ꝛ si q̄rtū dr̄is ꝑmi hoīs. cōtrad⁹ 1/120 dr̄is ꝑmi remanebūt 11/120
ꝑme burle cū dr̄is ꝛ q̄rtū 119/120 dr̄is ꝑmi. dr̄ inueni sup̄ quor
quor 119/120 ꝑmi si ꝛ ꝑb⁹ de 11/120 alt⁹. ex notāt si ꝑa burla inuēt cū dr̄is ꝛ
ſ tocī dr̄ 7 ex q̄rta dr̄ 12 nūs q̄ ꝑ. sicut. hac ex inuenī si ꝑb⁹ q̄rtū
demōstrationib⁹ inuenīet q oporter inuēire duos nūos ex quib⁹ 119/120 ꝑmi si ꝛ

minū ℔ alīū ⁊ sic hīet p̄mꝰ dr̄īsl 8℔ qui sē septies 12 er t̄ p̄a burſa cēnt
24 0 jn fa 20 7 jn tēa 20 2 jn q̄rta 20 7 er ſſ hō hīet 19℔
tēt 1649 q̄rt 117 hec ⁊ ſiles q̄ones p̄ elchuntas ſolū nō poſſt t̄ integrū ī
fortuitu accidere. q̄ poſitū q̄ ponat in tō elchuntas cēnt nūl t̄ q̄bz t̄ in-
tegrū caderet. ℣ Et ſi ꝓponat q t̄ p̄a burſa repiſſet dr̄ 6 jn fa 9
jn tēa 14 jn q̄rta 9 p̄cēt 6 ſē ½ et 9 ſē ¼ et 24 ſē ⅛ et 9
ſē 1/16 et adde ½ de 6 cū 9 erūt 24 quox ½ ſ. 1℔ adde cū 24 erūt
℔ 8 quox ¼ ſ. 12 adde cū 24 quox 1/16 ſ. 1/16 10 mł p 12 ſupi inuenīt
eribūt 5/16 et tot hūt p̄mꝰ quib nūcul cū 6 p̄me burſe faciunt 5/16 q̄ ½
ſ. 1/16 hī ſcōl. cū q̄bz nūcul 9 ſcōe burſe erūt 1/16 quox ½ ſ. 5/16 hī tēa
cū q̄bz nūcul 24 tēe burſe faciūt 5/16 quox ¼ ſ. 5/16 hī q̄rt hō. p̄cedit
ē ꝯ regula. er īuentē ꝓportionē dr̄ox burſe. ad dr̄ōſ p̄mi hōīs. q̄ habūſſe
tū q̄dē ē q̄ mediet dr̄ox p̄mi cū dr̄īſl 12 qui ſē ½ p̄me burſe ſē
q̄ntū dr̄ī ſi. Silr ½ dr̄ox ſi cū ½ ſe burſe. ſ. cū 5/16 ſē q̄ntū dr̄īj
ſi tēij. ſ. ut 1/16 dr̄ox tēij cū dr̄ 8 ſ. cū ¼ tēe burſe ſē q̄ dr̄īj
q̄rta hōīs. ſē 1/16 dr̄ox q̄rta hōīs cū dr̄ 5/16 ſ. cū 1/16 q̄rte burſe ſē q̄
dr̄īj p̄mi. Et q̄m ½ dr̄ox p̄mi cū dr̄īſl 12 ſuīt q̄ntū dr̄ ſi ½ de ½ ſ. 1/16
dr̄ox p̄mi cū ½ dr̄īſl 12 ſ. cū ¼ ſē q̄tū ½ dr̄ox ſi. cōīt adiūgunt
dr̄ 5/16 erūt 6 dr̄ox p̄mi cū dr̄ ½ et 5/16 ſ. cū 1℔ q̄ntū ½ dr̄ox ſi cū
dr̄īſl. 5/16 verū ½ dr̄ox ſi cū dr̄īſl 5/16 ſē q̄ntū dr̄īj tēij hōīs. q̄ 1/16 dr̄ox
p̄mi cū dr̄īſl 1℔ ſē q̄ntū dr̄īj tēij. Et ¼ de 1/16 ſ. 1/64 dr̄ox p̄mi cū 1/64
de— dr̄īſl 1℔ ſ. — cū ½ ſē q̄ntū dr̄īj tēij. cōīt adiūgunt dr̄ 8 erūt
1/64 dr̄ox p̄mi cū dr̄īſl ½ et ½ 8 ſ. cū dr̄īſl 12 q̄ntū 1/64 dr̄ox tēij cū
dr̄ ½ 8 ſē q̄ntū dr̄ q̄rta. cōīt adiūgunt dr̄īj 1℔ 7 erūt 1/20 dr̄ox p̄mi
⁊ dr̄īſl 5/16 et 1℔ 7 ſ. cū dr̄īſl 1/16 10 q̄ntū 1/16 dr̄ox q̄rta cū dr̄īſl 1℔ 7
verū 1/16 dr̄ox q̄rta cū dr̄īſl 1℔ 7 ſē q̄tū dr̄īj p̄mi. Silr ⁊ 1/20 dr̄ox p̄mi
cū dr̄īſl 1/16 10 ſē q̄tū dr̄īj p̄mi. cōīt auferūt 1/20 dr̄ox p̄mi remanebūt
112/120 dr̄ox ipi p̄mi q̄tū 1/16 10 ⁊ repiend ē nūl erō 1/16 ſīt 112/120 qui repīt
er m̄leatē de 1/16 10 in 120 diuiſa p 119 ut ſupi fecim. Et ſi ꝓponat q dr̄īſl
p̄e burſe m̄leatis p dr̄ōſ q̄rte burſe faciant m̄leatem dr̄ox ſe t̄ tēam
⁊ m̄leatis dr̄īſl p̄e t dr̄īſl tēie faciant m̄leatē dr̄ox ſcōe t ſeipōſ. ⁊ adhuc
m̄leatis dr̄īſl ſe cū q̄rte faciant m̄leatem dr̄ox tēie t ſeipīſ. ⁊ dr̄īſl
.nūj. burlaꝝ p̄cē. nūj. nūoſ t ḡtinua ꝓportionalitate er q̄bz p p̄mā burſā
ſūt 6 p ſa 12 p tēa 24 p q̄rtā 48 ut hic oſtendīt ⁊ oſtendēt ut ſ. er
hebīt p q̄ntitate p̄mi hōīs q̄s ſit t integrū hīe nīſ. m̄lea eoſ p 7 erūt 78
Et m̄lb dr̄oſ p̄me burſe. ſ. 6 p 7 erūt 42 ſīlr cū 78 et 42
diuidant integrū. diuide ipōſ ut hāt mīores nūoſ et hebīt p̄mꝰ 12 et
⁊ p̄a burſa erit dr̄ ⁊ Et t ſa erūt 18 ⁊ tēa 28 ⁊ q̄rta 96 cū
q̄bz tūcīet ſm hōiem hīe dr̄oſ 10 tēū 8 q̄rtū 5

7 duīs de p .119.

7 p̄mi remāebīt 119/120 ipi p̄mi q̄tū 1/16 10

vera p dr̄ox tēie cū dr̄ 1/16 8

91r

De duobus hominib; q̃ duas bſas b. ī uene

Ir duo hoīes bizanthios hītes. qui duas burſas cū bizāt̃ iuenerūt. in ſa quor erāt bizāt 12 plus q̃ ī pa vū ꝑm̄ dixit ſo. Si hītem ꝑmā burſā. hītem bis tm̄ q̃ tu. Cui alt̄ ꝑdixit. Et ſi ē hītem ſam burſā. hītem ſiqđē t̄ tm̄ q̃ tu. Q̃rit̄ que ſit q̃ntitas bizanthor illor 7 burſar. Q̃ a ꝑm̄ ē ꝑma burſa hē bis tm̄ q̃ ſecđ. g̃ hē tre ½ ½ cūctor bizanthor illor 7 duor hoīm̄ 7 manſus burſe. 7 q̃ ī ꝑma burſa ſt̄ bizāt̃ 12 mīa q̃ ī maioī. g̃ ſūma bizanthor illor duor ho minū 7 mīous burſe ē mīous ſilr bizāthī 12 ſūma bizāthor eorđē duor hoīm̄ 7 manſus burſe. Q̃ repiet duos nūos quor un̄ ſit 12 maior alt̄. Et mīor illor diuidat̄ ꝑ 2 integraliter. Et maior diuidat̄ ꝑ 4 ſinteꝝ 14 et 28 q̃r ꝑđe 14 ꝑ ſūma bizanthor illor 7 mīous burſe et 28 pone ꝑ eorđ ſūma 7 manſus burſe. Acc. ½ de 14 q̃ ſt̄ 10 7 ertuhe de 14 remanēt 4 et tot huīt ꝑm̄. a quibz uſq; ī 10 ꝑſeptus deſūt 2 7 tot iueneret̄ ī mīoī burſa. ſt̄ q̃ addē 12 erūt 16 ī maioī burſa. Vl alr. addē eī 10 eī 21 ꝑſeptus erūt 7 1 de q̃bz ertuhe 28 et 14 ꝑſeptus remanēt 2 et 16 ꝑ eorđē burſar q̃ntitate.

De trib; hoīb; et trib; burſis ab eis reptis

Tr hoīes ſt̄ tres. 7 repierēt tres burſas bizanthor. in ſa quar erāt bizāth 10 magis q̃ ī ꝑma. Et ī ſecđa erāt bizāth 12 magr q̃ ī ſa. hoc ē 22 magis q̃ ī ꝑa. Et ꝑm̄ illor eī ī mīoī burſa hāt bis tm̄ reliq̃s. Et ſc eī ſa burſa hāt ſ t̄ tm̄ reliq̃s. 7 tcī eī maioī burſa hīt quat tm̄. Et q̃rit̄ ſilr q̃t un̄q̃q; huīt. 7 q̃t ī unaq̃ burſar repierēt. q̃ ꝑm̄ eī mīoī burſa hē bis tm̄ reliq̃s. g̃ hē eī eađē burſa ½ ſūme bizāthor eor 7 eīdem burſe. ꝑ eīdē g̃ et ſecđ eī burſa hē ½ bizāthor illor et ſecđe burſe. Et tcī eī maioī burſa hē ¼ bizāthor eorđē tī hoīm̄ 7 manſ rīs burſe. Q̃r ponet ī ordine ¼ ½ ½ 7 repiat tres ordiet nūos q̃r ſecđ ſit 10 maior ꝑmo. et tcī ſit 12 maior ſecđo. et diuidat̄ mi nor ſpor integraliter ꝑ 2 et ſecđ ꝑ 4 7 tcī ꝑ 4 erūt ꝑ 2 et 42 et 64 et quibz mīor. ſ. 42 hāt ꝑ ſūma bizāthor eor 7 mīo rīs burſe. alē. ſ. 42 ꝑ eorđē ſūma 7 ſc burſe hāt. 4 maior ū. ſ. 64 hāt ꝑ eorđē ſūma ſ et manſus burſe. dein̄ acc. ½ de 42 erūt 28 que ſt̄ ſūma bizāthor ꝑmi hoīs et ꝑme burſe. Jſt̄ acc. ½ de 42 erūt 21 q̃ ſūt ſūma bizanthior ſecđi hoīs et ſc burſe. ſ. burſā acc. ¼ de 64 erūt 42 que ſt̄ ſūma bizāthor tcij hoīs et manſus burſe. addē g̃ ſūmꝑ bizāthor 28 et biz. 21 et biz. 42 erūt bizāthī 119 q̃ ſt̄ ſūma oīū bizāthor illor 2 et tī burſar. Vñ ut ſeptuagēt adūicē addē tm̄ tres ꝑmos poſitos nūos unde 42 et 42 et 64 erūt 149 que ſūt ſūma eorđē tī hoīm̄ et burſar. Jn qua unaq̃ t̄ gputat̄ ertuhe nt eī nō debeat gputū ī tm̄ ſemel. g̃ gputat̄ unaq̃ ꝑor bis magis

7 eīdē ꝑ pe burſe. ꝑ eīdē g̃ 7 ſc ē ſa burſa hē ½ bizā thor illor

Et qua ꝑm̄ eī mīou bſa hē ½ ſūme illor 7 mīous bſe

ſ. Lodeꝝ rōe acc ½ de 28 q̃ ſt̄ 21 et ēr he de 28 remā; 7 et tot huīt

149 64 42 42 42 28 28

extrahe $\frac{2}{3}$ eorum. s. summa bursarum primi et tercie burse remanent 14 pro bursa secundi et tercii et quarti hominis.
Similiter extrahe $\frac{3}{4}$ secunde summe. s. de 42 remanent $\frac{1}{4}$ eius. s. 13 pro summa tercii et quarti
et primi hominis. Item de tercia summa. s. de 64 extrahe $\frac{4}{5}$ quos habet tercius homo est tercia bursa. Remanebit $\frac{1}{5}$ eorum. s. 13 pro bursa quarti et primi et secundi hominis. Rursus de maiori summa. s. de 84
extrahe $\frac{5}{6}$ eorum remanebit $\frac{1}{6}$ eorum. s. 14 pro bursa primi et secundi et tercii hominis. Addere
itaque hos iiii. inventos numeros erunt 54 in quibus unusquisque hominum tantum computatus est. Quare
summa eorum est $\frac{1}{3}$ de 54. s. 18 ut predicimus. Quibus extractis de prima bursa. s. de 42
remanebunt 24 pro bursa prime burse. Similiter bursa secundi et tercii et quarti hominis. s. 14 extrahe de media eorum
s. de 18 remanent 4 pro bursa primi. Item bursa tercii et quarti et primi. s. 13 extrahe de 18
remanent 5 pro bursa secundi hominis. Eodemque modo de 18 extrahe bursam quarti et primi et secundi. s. 13
et bursa primi et secundi et tercii. s. 14 remanebunt pro bursa tercii hominis 5 et pro bursa quarti 4

Habeant cum bursa primi et secundi | De quatuor hominibus et una bursa

Duplum dierum tercii. Secundus quidem et tercius triplum quarti. tercius quoque et quartus quadruplum primi. quartus
autem et primus habent similiter cum bursa quincuplum dierum secundi. Hec est quoniam solutionem inventis per inventionem
proportionis dierum burse ad dierum primi hominis. Quantum primus et secundus cum bursa habent duplum
secundi medietas dierum primi et secundi et burse est quantum dierum tercii hominis. Similiter et reliquis propositionibus
habet quod $\frac{1}{3}$ secundi et tercii hominis et burse est quantum dierum quarti hominis et $\frac{1}{4}$ tercii hominis et
quarti et burse est quantitas dierum primi et $\frac{1}{5}$ dierum quarti et prime burse est quantitas
dierum secundi. Et quantum $\frac{1}{3}$ primi et secundi et burse est quantitas tercii. Tercia pars audientis
primi et secundi et burse. s. $\frac{1}{6}$ eorum est $\frac{1}{3}$ tercii hominis. Communiter adiungantur $\frac{1}{3}$ dierum secundi et burse
erunt $\frac{1}{6}$ primi et $\frac{1}{3}$ secundi et burse quantum $\frac{1}{3}$ secundi et tercii et burse. Sed $\frac{1}{3}$ secundi et tercii et
burse est quantitas quarti. Ergo $\frac{1}{6}$ primi et $\frac{1}{3}$ secundi et burse sunt quantitas dierum quarti hominis.
Quare $\frac{1}{4}$ de $\frac{1}{6}$ dierum primi hoc est $\frac{1}{24}$ et $\frac{1}{4}$ de $\frac{1}{3}$. s. $\frac{1}{8}$ dierum secundi et burse
sunt $\frac{1}{4}$ dierum quarti hominis. Communiter addatur $\frac{1}{4}$ tercii et burse erunt $\frac{1}{24}$ primi cum $\frac{1}{8}$ secundi et
cum $\frac{1}{4}$ tercii et cum $\frac{3}{8}$ burse quantum $\frac{1}{4}$ dierum tercii. et quarti et burse. Sed $\frac{1}{4}$ tercii
hominis et quarti et burse est quantitas primi. Ergo $\frac{1}{24}$ primi et $\frac{1}{8}$ secundi et $\frac{1}{4}$ tercii et $\frac{3}{8}$
burse sunt quantitas dierum primi. Quarta pars eorum. s. $\frac{1}{120}$ primi et $\frac{1}{40}$ secundi et $\frac{1}{20}$ tercii
et $\frac{3}{40}$ burse sunt $\frac{1}{5}$ dierum primi. Communiter adiungatur $\frac{1}{5}$ quarti hominis et burse erunt
$\frac{1}{120}$ primi et $\frac{11}{40}$ secundi et $\frac{1}{20}$ tercii et $\frac{1}{5}$ quarti et $\frac{11}{40}$ burse quantum $\frac{1}{5}$ quarti hominis
et primi et burse. Sed $\frac{1}{5}$ quarti et primi et burse est quantitas dierum secundi. Ergo $\frac{1}{120}$ primi
et $\frac{1}{40}$ secundi et $\frac{1}{20}$ tercii et $\frac{1}{5}$ quarti et $\frac{11}{40}$ burse sunt quantitas secundi. Communiter auferatur $\frac{1}{40}$ secundi
remanebunt $\frac{1}{120}$ primi et $\frac{1}{20}$ tercii et $\frac{1}{5}$ quarti et $\frac{11}{40}$ burse quantum $\frac{39}{40}$ dierum secundi. Sed
est dierum quarti hominis $\frac{1}{3}$ dierum secundi et tercii et burse. Quare $\frac{1}{5}$ quarti hominis est $\frac{1}{15}$ secundi et
tercii et burse. Ergo $\frac{1}{120}$ primi et $\frac{1}{15}$ secundi et $\frac{1}{15}$ et $\frac{1}{20}$ tercii. s. $\frac{7}{60}$ ipsius et $\frac{11}{40}$ et $\frac{1}{15}$ s. $\frac{41}{120}$
burse sunt $\frac{39}{40}$ [illegible] Communiter auferatur $\frac{1}{15}$ secundi remanebunt $\frac{1}{120}$ primi et $\frac{7}{60}$ tercii et $\frac{41}{120}$
burse quantum $\frac{109}{120}$ [illegible] de $\frac{39}{40}$ [illegible] auferatur $\frac{1}{15}$ [illegible] numerum $\frac{109}{120}$ [illegible]
remanebunt. Et quia dierum tercii hominis est $\frac{1}{3}$ dierum primi et secundi et burse. Ergo $\frac{7}{60}$ tercii
erunt $\frac{7}{120}$ primi et secundi et burse. Ergo $\frac{1}{120}$ et $\frac{7}{120}$ hoc est $\frac{1}{15}$ primi et $\frac{7}{120}$ secundi et
$\frac{41}{120}$ et $\frac{7}{120}$ hoc est $\frac{2}{5}$ burse sunt $\frac{109}{120}$ dierum secundi. Communiter auferatur $\frac{7}{60}$ secundi remanebunt

$\frac{7}{120}$

nebūt 1/4 p̄mi et 2/4 burse q̄ntū 17/20 dr̄oꝝ fi. Q. a si de 100/120 auferūt 7/120 remanēt 102/120 que sūt 17/20 ut dcm ē. Et qz dr̄ij fi sūt 1/4 p̄mi 7 q̄rti 7 burse. g̃ fi sūt 17/100 p̄mi 7 q̄rti 7 burse. Q. ī 1/4 p̄mi et 2/4 burse sūt 17/100 p̄mi 7 q̄rti 7 burse. cōit auferunt 1/4 p̄mi et 17/100 burse. remanebūt 21/100 p̄mi et 17/100 q̄rti q̄ntū 27/100 burse. Et ē om̄e dr̄ij q̄rti hōis 2/7 dr̄oꝝ fi 7 tcij et burse. Q. ī 17/100 q̄rti sūt 17/200 fi 7 tcij et burse. g̃ 21/200 p̄mi et 17/200 fi et tcij et burse sūt 27/100 burse. cōit auferunt 17/200 burse. remanebūt 21/200 p̄mi et 17/200 fi et tcij q̄ntū 17/74 burse. Et qz om̄e dr̄ij tcij hōis sūt 2/7 p̄mi et fi et burse. g̃ ī 17/200 tcij hōis sūt 17/600 p̄mi et fi et burse. Q. ī 21/200 et 17/600 .s. 79/600 p̄mi —— et 17/200 et 17/600 .s. 17/200 fi et 17/600 burse sūt q̄ntū 17/74 burse. cōit auferunt 17/600 burse. remanebūt 79/600 p̄mi cū 17/200 fi q̄tū 29/200 burse. Et qz 17/20 fi ut inuentū ē sup̄ sūt 1/4 p̄mi et 2/4 burse. ~~cōit auferunt —— burse remanebūt~~ decima pars de 17/20 fi. .s. 17/200 tp̄i erit 1/40 p̄mi et 1/4 burse. g̃ 79/600 et 1/40 .s. 87/600 eīdē cū 1/4 burse sūt 29/200 burse. cōit auferunt 1/4 burse. remanebūt 87/600 p̄mi q̄ntū 21/200 burse. Q. ī repiendi sūt duo nūi quoꝝ 87/600 p̄mi sūt 21/200 fi erūt 67 et 87. Q. ī si p̄mꝰ hō hēt 67 burse ē 87. Et qz 1/4 p̄mi et 2/4 burse sūt 17/20 fi —— acc 1/14 de 67 et 1/7 de 87 et habeb 2/7 27 p 17/20 dr̄oꝝ fi. Q. ī ē sūt 17 ad 20 ut 2/7 27 ad dr̄os fi. mter g̃ 2/7 27 et p 20 et dūdet p 17 eribūt 14 et tot hūūt fl. quib; additis cū dr̄. fi et burse. .s. cū 67 et 87 erūt 190 q̄z dimidiū. .s. 95 hal p dr̄ijs tcij cū p̄mꝰ et fl et burse hant duplū tcij q̄b; 95 additis cū dr̄ijs fi et burse erūt 222 quoꝝ tcia pars. .s. 74 ē q̄ntus dr̄oꝝ q̄rti hōis. **Quod aliud de trib; hominib; et una burse**

Sunt tres q; dr̄ij p̄mi et fi cū burse duplū dr̄oꝝ tcij. Sed q; et tcij tplū p̄mi. tcij ū 7 p̄mi. quadruplū fi. Et p̄ōitē p̄dē inuēiet dr̄os tcij hōis ē 1/2 sūme dr̄oꝝ tū hōinū 7 burse p̄mi ēē 1/7 fi 1/7. Q. ī p̄ce tpam ē 60 de q̄ p̄mꝰ hēt 1/7 .s. 14 fl 1/7 .s. 12 tcꝰ 1/2 .s. 20 quib; om̄ib; et tcius de 60 remanēt 12 p dr̄ijs burse. **De quatuor hominib; et una burse cū duo illoꝝ dicāt reliqui quelibet insolubilis**

Quatuor quidē p̄mi et fi cū burse sūt duplū dr̄oꝝ tcij 7 q̄rti. Sed ū et tcij sūt tplū q̄rti 7 p̄mi. tcij āt 7 q̄rti sūt quadruplū p̄mi 7 fi. q̄rti q; 7 p̄mi sūt cū burse sūt q̄ntuplū dr̄oꝝ fi et tcij. ℔ q; ē insolubil et cōstat sic. Q. ū p̄mꝰ et sol cū burse hūt duplū fi et tcij. Ideo dr̄ij tcij et q̄rti hōis sūt 1/2 sūme dr̄oꝝ. uij. hōinū et burse. Silr et p̄cedētibz hēt q dr̄. q̄rti et p̄mi sūt 1/7 eīdē sūme. et dr̄. p̄mi et fi sūt 1/7 eīdē sūme. necnō et dr̄ij fi et tcij sūt 1/7 et q; int p̄mū 7 fm hūt q̄ntū p̄dē sūme et int tcium 7 q̄rtū hūt tcia. g̃ int om̄es. uij. hūt 4/7 hoc ē 22/60 hūt 7 int p̄mū 7 q̄rtū. q̄rtū. et int fm et tcium. sertū. g̃ int om̄es. uij. hūt 6 1/7

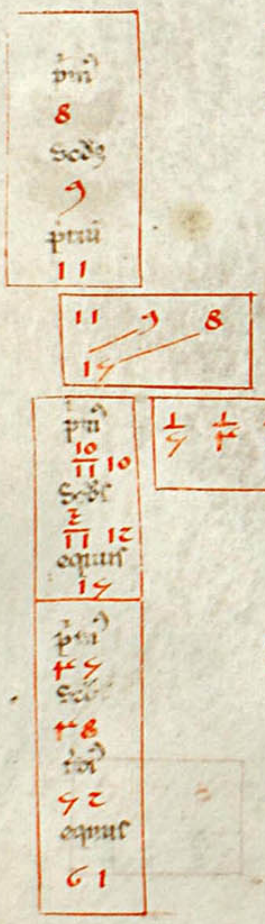
s. 24/60 pdce sume. ostensū t̄ ē ipos hīc p p̄mā gputōz 22/60 pdce sume. g̊ 24/60
ipi sume st̄ 22/60 eidē q̄ ē igneiens. et hoc uolu demōstrare.

De quinq; homib; et una bursa

Primū quidē et fc hūt cū bursā duplū t̄ū reliquoz hoīnū. Sedc et t̄cī
triplū. t̄cī et q̄rt̄. quadruplū. q̄rt̄ 7 q̄nt̄ quincuplū. Q. nt̄ 7 p̄m̄ hānt sīl
sexcuplū t̄ū reliquoz hoīnū. et hac q̄dē pōnōe cogscet t̄cīū 7 q̄rtū 7
q̄ntū hoīe hīc 1/2 sūme dīoz q̄nq; hoīnū 7 burse. q̄rtū q̄p 7 q̄ntū
7 p̄mū 1/2 Q. ntū 7 p̄mū et fm 1/4 p̄mū 7 fm 7 t̄cīū 1/6 fm 7 t̄cīū 7
q̄rtū 1/7 pdē p eoz sūma 7 bursa ꝑ 20 q̄ nūc dimidiē integr̄ p ptes
pdās. et acc. p ordinē 1/7 1/6 1/4 1/2 1/2 et ipīs et hebit dīoz t̄cij et q̄rti
7 q̄nti hoīs 140 dīoz q̄p q̄rti 7 q̄nti 7 p̄mi 104 q̄nti p̄mi 7 fi 84
p̄mi 7 fi et t̄cij 70 bursē 7 dīoz fi et t̄cij et q̄rti erūt 60 q̄b̄ q̄nq; tm
meris sūmā uicies reddē p triplo dīoz q̄nq; hoīnū ꝑ 45 cū uidelic t̄ q
puta hīc ꝓcepit nūs. Q. t̄ acc. 1/2 de ꝑ 45 cū cadat i integrū. erūt
142 p sūma dīoz hoīnū. qua ertūt de ꝑ 20 rēmanēt t 67 p dt.
burse. Post h adde dīoz p̄mi 7 fi 7 t̄cij cū dt. q̄rti et q̄nti 7 p̄mi. s. 70
cū 104 erūt 174 et tot hūt inē oēs p̄o bis q̄puato. Q. t̄ ertuhe 142
s. sūma eoz de 174 rēmanēt tt et tot hē p̄m. q̄s adde cū dīoz t̄cij 7 q̄rti
7 q̄nti. erūt 162 et tot hūt inē p̄mū 7 t̄cīū 7 q̄rtū. h inē oēs q̄nq; hūt tm
142 sī h q̄o ē īsolubīl n̄ ꝓnam fm hoīe hīc debitū 9 q̄si a 142 m 162
adde nūq; dīoz tt cū debito fi. s. ertuhe 9 de tt rēmanēt 18. q̄s er
tuhe de 70 rēmanēt 47 de q̄bz ertuhe 9 s. debitū fi rēmanēt 28 q̄s
ertuhe de dīoz fi et t̄cij et q̄rti s. de 60 rēmanēt 12 et tot hē q̄rt̄. q̄s
adde cū 47 erūt 59 q̄s ertuhe de 140 rēmanēt 7 et tot hē q̄nt̄.

Inuenire quātū de ēptione equoz i uia cōtingat sīm datā ꝓportionē

Duo hoīes byzāthioz hūerūt iuenerūt equū equū ad uendend. quē cū ipi
emē uoluissēt. p̄m dixit so. Si daret m 1/2 tuoz byzāthioz hīc n. p̄tē
eq. cui alē poterit 1/2 tuoz biz. et eq sīl p̄tē hīc ꝓpōnit. Q. uerū p̄tē
eq et biz. uniuscuiq; ꝑ ordinē 1/2 1/2 et ertuhe 1 q̄ē sīl t et ipīl t
rēmanēt t que milia ꝑ 1/2 ertē biz. 8 et tot hūt p̄m. Jē 1 q̄ē sīl
1/2 ertuēto et ipīs 1/2 rēmanēt t q̄ milia ꝑ t reddē biz. 9 et
tot hūt alt. Q. unde milia t ꝑ 1/2 erūt 12 de q̄bz tolle 1 q̄ ertuhe et
milia rēmanēt de 1 q̄ē sīl t i 1 q̄dē sīl 1/2 rēmanēt biz. 11 p ptes equi.
Credit ē h regla et regla ꝓportionū. s. et iuētōe ꝓportionis byzāthioz uni
ad biz. alt̄ que ꝓpōnio iuenit hic. Inuento ꝓportionis et bōz uni ad h al
Sīm p̄m eū 1/2 byzāthioz sedi teri equa ꝓportionē ꝓcedit regla ut hic.
hē q̄rtū sedc eū 1/2 biz p̄mi. Si eōit auferat 1/2 biz. fi. remanebit
p̄m equal duobz t̄cij byzāthioz fi. 7 biz. sīl. Jē si auferat eōit 1/2 biz.
p̄mi rēmanebit 1/2 biz. p̄mi q̄rtū 1/2 biz. fi. Vñ reperiri ē duo nūi.



quorum $\frac{5}{4}$ unus sit $\frac{2}{5}$ alius multiplicabis ergo 4 que sunt sub virgula de $\frac{5}{4}$ per 2
que sunt sub virgulam de $\frac{2}{5}$ erunt 8 et hoc est quod supra multiplicavimus 2 scilicet 1
extracto de 5 per 4 et habuimus pro bis primi hominis 8 Item ut habeas alium numerum multi-
plicandum sunt 5 que sunt sub virgula de $\frac{2}{5}$ per 5 que sunt sub virgulam de $\frac{5}{4}$ erunt
9 et hoc est quod fecimus supra cum extraximus 1 de 4 et residuum scilicet 5 multi-
plicavimus per 5 et habuimus 9 pro bis secundi hominis. Ubi autem ut possimus demonstrare in-
ventionem primi equi quod 8 et 9 sunt numeri quorum $\frac{5}{4}$ unus sunt $\frac{2}{5}$ alterius redigantur
ipsa 8 et 9 in partes alicuius numeri ut acceptis ipsis partibus ex numero illo
habeamus bis unius eorum quod redigantur est in partes de 12 cum $\frac{1}{4}$ $\frac{1}{5}$ reperiantur in ipsis. Sed
est 8 de 12 due tercie et 9 tres quarte. Unde primus homo habet $\frac{2}{5}$ ex quo numero
secundus habebit $\frac{5}{4}$ eiusdem numeri sicque numerus ille 12 de quibus si acceperis $\frac{5}{4}$ $\frac{2}{5}$ habebimus
bis illarum. Accepimus est supra $\frac{2}{5}$ de 12 cum 1 deinde de 8 scilicet 2 multi-
plicavimus per 4 Sed est 2 de 5 due tercie multiplicatis quidem 2 per aliquem numerum numerus qui
exierit ex multiplicatione erit $\frac{2}{5}$ ex numero qui provenit ex multiplicatione de 5 in
quo numero in quo multiplicata fuerit 2 Unde multiplicatio de 2 in 4 scilicet 8 est $\frac{2}{5}$ mul-
tiplicationis de 5 in 4 scilicet de 12 Similiter accepimus $\frac{5}{4}$ de 12 cum deinde de
4 scilicet 5 multiplicavimus per 5 deinde quod primus habet $\frac{2}{5}$ alicuius numeri ex quo alius habet $\frac{5}{4}$
[illegible] equum primus petit secundum $\frac{1}{5}$ suorum bisanthiorum ergo petit $\frac{1}{5}$ de $\frac{5}{4}$ illius
numeri de quo secundus homo habet $\frac{5}{4}$ Nam $\frac{1}{5}$ de $\frac{5}{4}$ ipsius numeri est $\frac{1}{4}$ eiusdem numeri ergo primus pe-
tit secundum $\frac{1}{4}$ ipsius numeri de quo ipse habet $\frac{2}{5}$ quo habito habebit primus $\frac{1}{4}$ $\frac{2}{5}$ ipsius numeri de
quo ipse habet $\frac{2}{5}$ Nam $\frac{1}{4}$ $\frac{2}{5}$ ipsius numeri est $\frac{11}{12}$ eiusdem numeri. Ut quia cum primus habet
$\frac{1}{4}$ $\frac{2}{5}$ scilicet $\frac{11}{12}$ ipsius numeri de quo ipse habet $\frac{2}{5}$ et habet primum equum ergo ipsius numeri est $\frac{11}{12}$
primum equum habet primus $\frac{2}{5}$ de 12 scilicet 8 et secundus $\frac{5}{4}$ scilicet 9 et primum equum est $\frac{11}{12}$ de 12
$\frac{1}{4}$ $\frac{2}{5}$ 11 Unde cum supra de multiplicatione de 5 in 4 extraximus multiplicationem de 1
in 1 tamen remanserunt $\frac{11}{12}$ de numero ex quibus primus habet $\frac{2}{5}$ et secundus $\frac{5}{4}$ scilicet de 12
[illegible] regulam multiplicabile diverse questiones solvi [illegible] in sequentibus
[illegible]

Aliter cum precium equi sit certa quantitas

Et [illegible] equi sit bis 14 [illegible] bis 8 primi hominis et 9 [illegible]
11 [illegible] singularis 8 et 9 per 14 [illegible]
11 [illegible] $\frac{10}{11}$ 10 [illegible] $\frac{5}{11}$ 12 | De emptione equi inter tres
[illegible] $\frac{1}{5}$ | homines cum unus petat alteri tantum per ordinem
[illegible] bisanthiorum [illegible]
[illegible] equum [illegible] $\frac{1}{5}$ $\frac{1}{4}$ $\frac{1}{5}$ extrahe 1 de 5 remanent 2
[illegible] multiplicabis per 4 que sunt sub alia virgula erunt 8 [illegible] multiplicationis de 1 quod
est 5 in uno quod est 4 erunt 9 que multiplicabis per 4 que sunt sub alia virgula erunt
bis 4 4 et tot habuit primus. Item extrahe 1 quod est 4 ex ipsis 4 remanent 5
que multiplicabis per 4 et [illegible] multiplicationis de 1 quod est 4 in 1 quod est 4 erunt
16 que multiplicabis per 5 [illegible] virgula erunt 4 8 et tot habuit secundus [illegible] extrahe
1 quod est 4 ex ipsis 4 remanent 4 que multiplicabis per 5 [illegible] virgule [illegible]

primus
8
secundus
9
primum
11

11 9 8
14

primus
$\frac{10}{11}$ 10
secundus
$\frac{5}{11}$ 12
equus
14

$\frac{1}{5}$ $\frac{1}{4}$ $\frac{1}{5}$

primus
4 5
secundus
4 8
tertius
5 2
equus
6 1

multiplicationem de 1 quod est sup 4 in 1 quod est sup 3 erunt 12 que multiplicata per 4
erunt 42 et tot bis. hu. tercii. Ideo multiplicata minor quam sunt sub virgulis s. 3 per 4 que per
4 erunt 60 sunt que cum homines sint impares adde multiplicationem de 1 quod est sup 3 in 1
quod est sup 4 quam multiplicatum per 1 quod est sup 4 quam multiplicatio sua tantum 1 erunt 61 et tot
bis. valuit eque. Nam si homines essent pares extraheres multiplicationem minorum quam sunt sub vir-
gulas ex multiplicatione minorum qui sunt sub virgulis ut in antecedente quod secundum procedit est
hec ex proportionis regula sic. Inuentio proportionis quam habet primus ad secundum ex qua portione procedit re-
gula sua

Quando primus cum $\frac{1}{3}$ bis. fi. et secundus cum $\frac{1}{4}$ bis. tercii et tercius cum $\frac{1}{4}$ bis. primi
habent tantum primum equalem. Ergo primus cum $\frac{1}{3}$ bis. fi. habuit quantum fi. cum $\frac{1}{4}$ bis. tercii et quantum tercius
cum $\frac{1}{4}$ bis. primi. et quia primus cum $\frac{1}{3}$ bis. fi. habet quantum fi. cum $\frac{1}{4}$ bis. tercii. Si communiter
auferatur $\frac{1}{3}$ bis. fi. habebit primus quantum $\frac{2}{3}$ bis. fi. et quantum bis. tercii $\frac{1}{4}$ bis.
tercii. Item quia fi. cum $\frac{1}{4}$ bis. tercii habet quantum tercius cum $\frac{1}{4}$ bis. primi. Si communiter auferatur
$\frac{1}{4}$ bis. tercii habebit secundus homo quantum $\frac{3}{4}$ bis. tercii et quantum $\frac{1}{4}$ bis. primi. Rursus quia
tercius homo cum $\frac{1}{4}$ bis. primi habet quantum primus cum $\frac{1}{3}$ bis. fi. Si communiter auferatur $\frac{1}{4}$ bis.
primi ~~habet quantum primus~~ remanet tercius homo equalis $\frac{3}{4}$ de bis. primi et de $\frac{1}{3}$ bis. fi.
Sed demonstratum est quod primus homo habet $\frac{2}{3}$ de bis. fi. et quartam de bis. tercii. Nunc ostendendum est
quod pars sit bis. primi de bis. fi. tantum que ostenduntur sic quantum tercius homo habet $\frac{3}{4}$ de bis. primi
et de $\frac{1}{3}$ de bis. fi. quarta pars de bis. tercii est $\frac{1}{4}$ de $\frac{3}{4}$ de bis. primi et de $\frac{1}{3}$ de
bis. fi. Quarta vero pars de $\frac{3}{4}$ bis. primi est $\frac{1}{4}$ bis. primi et quarta pars de $\frac{1}{3}$ bis.
fi. est $\frac{1}{12}$ bis. fi. Ergo quarta pars bis. tercii $\frac{1}{4}$ bis. primi et $\frac{1}{12}$ bis. fi. Ergo primus habet $\frac{1}{12}$ $\frac{2}{3}$
s. $\frac{3}{4}$ bis. fi. et $\frac{1}{4}$ bis. suorum cum habet $\frac{2}{3}$ bis. fi. et $\frac{1}{4}$ bis. tercii. Et quia bis.
primi hominis sunt $\frac{3}{4}$ bis. fi. et $\frac{1}{4}$ bis. suorum. Si communiter auferatur $\frac{1}{4}$ bis. primi re-
manebunt $\frac{3}{4}$ bis. primi quantum $\frac{3}{4}$ bis. fi. Quare reperiendi sunt duo numeri quorum $\frac{3}{4}$
unius sunt $\frac{3}{4}$ alterius erunt 14 et 16. Nam $\frac{3}{4}$ de 14 sunt quantum $\frac{3}{4}$ de 16 ergo in qua
proportione sunt bis. primi hominis ad bis. fi. Deinde inuenienda est proportio bis. primi ad
bis. tercii quam proportionem inuenies sic quia primus ut prediximus habet $\frac{2}{3}$ bis. fi. et $\frac{1}{4}$ bis.
tercii. Videas de $\frac{2}{3}$ bis. fi. que pars sit de bis. tercii et primi hominis. Omnis est bis. fi.
hominis sunt $\frac{3}{4}$ bis. tercii et $\frac{1}{4}$ bis. primi. Ergo bis. primi hominis sunt $\frac{1}{4}$ $\frac{1}{2}$ s. $\frac{3}{4}$ bis. tercii
et $\frac{2}{14}$ bis. suorum. Quare si communiter auferantur $\frac{2}{14}$ bis. primi remanebunt $\frac{13}{14}$ s. bis. primi
quantum $\frac{3}{4}$ bis. tercii. Ergo reperiendi sunt duo numeri quorum $\frac{13}{14}$ unius sunt $\frac{3}{4}$ alterius erunt 44
et 42 ergo in qua proportione sunt 44 ad 42 in eadem proportione sunt ad bis. primi hominis
ad bis. tercii. Et quia proportio bis. tercii primi ad bis. fi. est 14 ad 16 et tota
simul proportio primi hominis ad fin. sicut est triplum de 14 s. 44 ad triplum de 16 s. ad 48
ergo si primus habet 44 ad secundum habet 48 et tercius 42 quia bis. primi hominis s. 44 sunt
$\frac{3}{4}$ de 60 in quo reperiuntur peritiones ipsorum s. $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{3}$ Ideo accepimus superius
$\frac{3}{4}$ de 60 cum habuimus bis. primi hominis quam acceptionem accepimus sic extra-
ximus 1 de 3 et 2 quam remanebunt multiplicatum per 4 et habuimus 8 quare ac-
cepimus tot $\frac{2}{3}$ de 12 que oriuntur ex multiplicatione de 3 in 4 et cum sunt 8 sumo-
ximus multiplicationem de $\frac{1}{3}$ in $\frac{1}{4}$ s. cum multiplicamus 1 quod est sup 3 per 1 quod est sup 4

est 14 ad 16 in eadem proportione

Quare $\frac{2}{3}$ bis. fi. sunt $\frac{1}{2}$ bis. tercii et $\frac{2}{14}$ bis. primi. Quare

6 erūt 2 6 4 er tot hūit ꝑmi. Et sic sp ī ꝑncipio ē errnhend' nūc q ē
sīgulī de mūo qui ē sb ugla illi que q̄rta ē ab ipo hoīe cui' sūmā tē in
uēnī. sicut in de ꝑo hoīe fecim'. dem ē mlcand p num q ē sb segmto regla
tē erit addenda mlticatō supior mūor. sic sp usq ī finē q̄rtūq hoīes
sūnt semel errnhendo 7 semel addendo grad'ieris. Sine at̄ n addē nec
errnhere debes. Q v ut inēiam' bīs. si hoīe errnhat 1 q ē sī 4 et
ipis 4 q ipe ꝑtit 1/4 remanēt 2 que mlcā p 4 erūt 14 q̄b sī
adde 1 qd erit et mltplicatō de 1 q ē sī ī q ē sī 1 qd ē sī
4 erūt 16 que mlcā p 6 erūt 96 de quib; errnhe mlcatōes de 1
q ē sī 4 ī 1 q ē sī 4 quā ī 1 q ē sī 6 q eā n sit n tm 1 tēa
nēt 34 que mlcā p 2 erūt 384 et tot hūit sī. Sī ut hām' bīs. tēq
hoīe errnhe 1 q ē sup 4 de ipis 4 remanēt 4 q̄ mlcā p 6 erūt 24
q̄b; sīpadde 1 q. erit et mlcatōe uni' q ē sī 4 ī 1 q ē sī 6 erūt
24 que mlcā p 2 erūt 74 de q̄b; errnhe mlcatōes de 1 q ē sī 4
in 1 q ē sī 6 quā in 1 q ē sī 2 rēmēt 24 q̄ mlcā p 4 erūt 296
7 tot hūit tēq. Sī errnhet de 6 rēmēt 4 q̄ mlcā p 2 erūt 14
quib' sīadde 1 erūt 16 que mlcā p 4 erūt 64 de q̄b; errnhe 1 qd
erit et mlcatōe hūi' uni' q ē sī 6 ī 1 q ē sī 2 q̄ ī 1 q ē sī 4 tēa
nēt 62 que mlcā p 4 erūt 248 7 tot hui' q̄rtē hō. Et mlcā 2 p
4 que p 4 que p 6 erūt 360 Sī mlcā 1 q ē sī 2 p 1 q ē
sī 4 qd p 1 q ē sī 4 q p 1 q ē sī 6 erit 1 q errnhe de
200 ideo q hoīes sī parer rēmēt 249 que sī ꝑtiū equi.

Natūa hui' regle 7 regulam

Quali' sīa regla ꝓcedat ex regla ꝓportiōū

ꝓportionū. hīs. Q a ꝑmi cū 1/2 bīgathor sī hī ꝑtiū eq sic sī cū 1/4
bīs. tēq. et sic tēi cū 1/4 bīs. q̄rti. et sic q̄rti cū 1/6 bīs. ꝑmi. g ꝑmi cū 1/2
bīs. si hī q̄rtiū sī cū 1/4 bīs. tēq. et q̄rtiū tēi cū 1/4 bīs. q̄rti. 7 q̄rtiū
q̄rti cū bīs 1/6 bīs. ꝑmi. Et q̄m ꝑmi ē 1/2 bīs. si hī q̄rtiū sī cū 1/4
bīs. tēq. si cōīt. ut ferunt 1/2 bīs. si. iueīet ꝑmiū hoīem hīe 2/2 bīs.
si. et 1/4 bīs. tēq. Si cōīt sī cū 1/4 bīs. tēq hīt q̄rtiū tēi cū 1/4 bīs.
q̄rti. Si cōīt. ut ferunt 1/4 bīs. tēq. hebit sēdī 2/4 bīs. tēq et 2/4 bīs. q̄rti.
Sīlr si sīpdēo in ꝓcede ferūt. iueīet q tēi hō hī 2/4 bīs. q̄rti hoīs et 1/6
bīs. ꝑmi. 7 q q̄rti hō hī 2/6 bīs. ꝑmi et 1/2 bīs. si. quib' p ordinē eq'
tūr. iueīenda ē ꝓportio ꝑmi hoīs ad bīs. si. quā iueīem sic. q ꝑmi hī
2/2 bīs. si. et 1/4 bīs. tēq. redigem hāc 1/4 ī ꝑtes bīs. ꝑmi 7 si. qd
fiāt n possum' n ꝑmi redigat ipsi 1/4 ī partes bīs. q̄rti hoīs 7 ꝑmi. qd
fiāt sic. q. bīs. tēq hoīs sī 2/4 de bīs. q̄rti et 1/6 de bīs. ꝑmi. g
1/4 bīs. tēq ē 1/4 de bīs. q̄rti et 1/24 de bīs. ꝑmi hoīs. g bigathy ꝑ
mi hoīs sī 2/2 bīs. si. et 1/4 bīs. q̄rti. et 1/24 bīs. sunor. si cōīt. ut ferunt
1/24 bīs. ꝑmi. erūt 12/24 bīs. ꝑmi 2/2 bīsor. si 7 1/4 bīs. q̄rti. Et

ꝑmus
2 6 4

Sēdī
2 8 4
tercī
2 9 6
Q'tus
2 1 4

ꝑcūs eq.
2 4 9

quam bis quarti hominis sunt $\frac{5}{6}$ bis primi et $\frac{2}{3}$ bis secundi quod $\frac{1}{4}$ bis quarti hominis est $\frac{1}{6}$
bis primi et $\frac{1}{14}$ bis secundi quod $\frac{27}{24}$ bis primi sunt $\frac{1}{14}$ $\frac{2}{3}$ s. $\frac{11}{14}$ bis secundi et $\frac{1}{6}$
bis suorum communis ausentur $\frac{1}{6}$ bis primi erunt $\frac{19}{24}$ bis primi $\frac{11}{14}$ bis secundi.
Quare reperiendi sunt duo numeri quorum $\frac{19}{24}$ unius sunt $\frac{11}{14}$ alterius 264 erunt 264
et 284 qui sunt bis primi [illegible] in sua regula inveniuntur. Itaque si dixeris bis
secundi hominis in partes bis tertii sic reduximus bis primi hominis in partes secundi invenies quod $\frac{27}{24}$
bis secundi sunt $\frac{19}{24}$ bis tertii. Quare invenies duos numeros quorum $\frac{27}{24}$ unius sunt $\frac{19}{24}$
alterius erunt 844 et 888 sunt in hac proportione 844 secundi hominis. In
alia autem 284 quod bis secundi hominis quod redigenda sunt sunt 844 in 284 est
[illegible] 284 tota pars de 844 quia divides 888 per 3 evenient 296
[illegible] bis tertii hominis [illegible] bis tertii hominis in proportione bis quarti
erunt $\frac{7}{8}$ bis tertii $\frac{27}{24}$ bis quarti. Quare invenies duos numeros quorum $\frac{7}{8}$ unius
sunt $\frac{27}{24}$ alterius erunt 296 et 314 ut supra pro bis tertii et quarti hominis inve-
nimus bis vero primi hominis s. 264 sunt $\frac{11}{14}$ de 360 quia 360 provenerunt ex multiplicatione
numerorum qui sunt sub [illegible] s. de 3 in 4 quia in 4 quia in 6 unde cum supra in
inventione bis primi hominis extraximus 1 de 3 remanserunt 2 quia 2 sunt $\frac{2}{3}$ de
3 [illegible] 2 per 4 ut supra secundum [illegible] 8 per $\frac{2}{3}$ de 12 que
provenerunt ex multiplicatione de 3 in 4 sunt que 8 cum addiximus 1 [illegible]
de 1 quod est 3 in 1 quod est 4 habemus 9 [illegible] $\frac{3}{4}$ [illegible] 9
cum multiplicavimus per 4 habemus 44 quod $\frac{3}{4}$ de 60 quia [illegible] 12
[illegible] 4 [illegible] 44 [illegible] 1 [illegible]
[illegible] de 3 [illegible] 4 [illegible] 4 remanserunt 44 quia 44 sunt $\frac{11}{14}$ de 60
[illegible] $\frac{1}{60}$ [illegible] $\frac{3}{4}$ [illegible] $\frac{11}{14}$ [illegible] 1 [illegible] $\frac{1}{60}$ de 60 [illegible]
[illegible] 1 [illegible] 3 [illegible] 1 [illegible] 4 [illegible] 1 [illegible] 4 [illegible] $\frac{1}{3}$
de $\frac{1}{4}$ de $\frac{1}{4}$ [illegible] $\frac{1}{60}$ [illegible] cum multiplicavimus 44 per 6 habemus 264 per $\frac{11}{14}$
de [illegible] 360 ut prediximus. Unde si [illegible] hominibus hac [illegible]
in inventione bis [illegible] accepimus [illegible] de 360 [illegible]
hominis s. 284 sunt $\frac{19}{24}$ de 360 [illegible] bis tertii hominis s. 296 sunt $\frac{27}{24}$ de 360 [illegible]
bis quarti hominis s. 314 sunt $\frac{7}{8}$ de 360 et in hac [illegible] regula [illegible]
[illegible] $\frac{11}{14}$ de 360 [illegible] $\frac{1}{3}$ [illegible]
[illegible] $\frac{1}{3}$ de $\frac{19}{24}$ de 360 [illegible] $\frac{1}{3}$ [illegible] $\frac{1}{72}$ $\frac{1}{4}$
de 360 [illegible] $\frac{1}{4}$ $\frac{1}{72}$ [illegible] $\frac{11}{14}$ [illegible] $\frac{1}{360}$ de 360 [illegible]
360 [illegible] in inventione bis [illegible] 1.
[illegible] 349

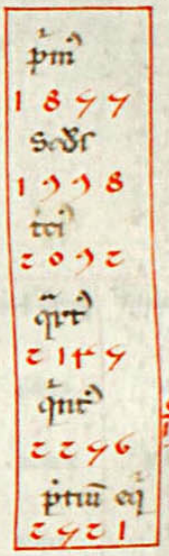
Ingredi [illegible] quod [illegible] qui habet [illegible] 4 quorum primum [illegible] $\frac{2}{3}$ [illegible] $\frac{1}{4}$ [illegible]
secundum $\frac{3}{4}$ [illegible] et $\frac{1}{4}$ quarti [illegible] $\frac{4}{5}$ quarti et $\frac{1}{6}$ primi. [illegible]
[illegible] $\frac{5}{6}$ primi et $\frac{1}{3}$ [illegible] 264 [illegible] 284 [illegible]
296 [illegible] 314 [illegible] si homines [illegible] quorum primum ad [illegible]
[illegible] $\frac{1}{3}$ [illegible] bis [illegible] $\frac{1}{4}$ [illegible] $\frac{1}{4}$ [illegible]

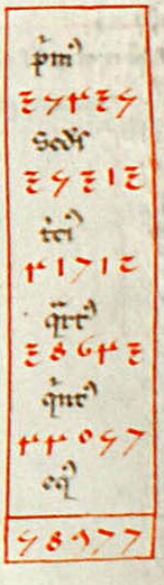
Inventio proportionis primi ad secundum in 4 hominum questionum.

primum vas
264
secundum
284
tertium
296
quartum
314

99

Alia quō de quinque hominibus





.l.tꝛo remanēt 18 12 que mlcet ꝑ 7 erūt 4ꝛ 7 6 q̄b⁹ frādē mlt
eatōnē de 4 1 6 q̄ 1 8 q̄ 1 7 .l.ꝛ8o erūt 4 9 1 6 q̄ mlcet ꝑ
7 erꝛ — erꝛ ꝛ 17 12 7 tot hūit tēl. Et si de q̄rto 7 q̄nto hoīe fm
dict̄ 7 ostensā mat̄iā īueīre studuerīs. repies q̄ q̄rt⁹ hō hūit bīz.
7 8 6 ꝛ 2 et q̄nt⁹ hūit ꝛ ꝛ o 47 7 sic de plūb facē potēs. Alia q̄o de
Uerū si hoīes fuīnt ꝛ 7 ꝑm⁹ tenet 5o 1/2 1/2 fl̄ tcio 1/4 1/2 nūi hoīb;
tcī q̄rto 1/6 1/4 q̄rt⁹ ꝑmo 1/7 1/6 de 1/2 1/2 faciet 2/12 de 1/4 1/2 faciet
2/20 de 1/6 1/4 faciet 11/20 de 1/7 1/6 faciet 17/2ꝛ 7 opabis ꝓa fm q.
sup⁹ docuim⁹ 7 īueīes ꝑm⁹ hīe 176 7ꝛ fm 2o 77 2 Tercium.
2o 4 8 2o Q̄rtū 2 7 8 8 2o et ꝓtū eq̄ cē 2 9 2 2 9 1
Duo hoīes bigāthi | De duobus hōib; ꝺ duob; equis ꝑ regl̄ā ꝓportiōn
hūnt īuenerīt duos eq̄s ad uendend. quor fl̄ ualebit bīz. 7 plꝰ ꝑtō
ꝑmi. Et ꝑm⁹ hō cū suis bīz. ꝓponit ꝑmū equū emē hītl 1/2 bīz. — fi.
sc̄s ū hītl 1/2 bīz. ꝑmi. ꝓpōit fm equū emē. 7 fiant ḥ oīa ī īteḡis
nūis. Queritꝰ ꝓtū uīcūiꝰ eq̄. et q̄t bīz. uīcūiꝰ hāt. qꝝ ꝑm⁹ cū 1/2
bīzor fi hē ꝓtū ꝑmi eq̄. Et fl̄ cū 1/2 bīz. fi hē ꝓtū fi eq̄. ꝙ ꝑm⁹ cū
1/2 bīz. fi hē 7 mīn⁹ q̄ fl̄ cū 1/2 bīz. ꝑmi. Vñ si auferat⁹ et uīcꝰ
1/2 bīz. fi hēbit ꝑm⁹ bīz. 7 mīn⁹ q̄ 2/2 bīz. fi et 1/2 bīz. suor. Cꝛ
si adhuc et uīcꝰ auferat 1/2 bīz. ꝑmi. remanebꝝ 2/2 bīz. ꝑmi bīz. 7
mīn⁹ q̄ 2/2 bīz. fi. Cꝛ īueīat duos īteḡs nūos quor 2/2 unī sīt 7
mīn⁹ de 2/2 altī. Et ē mod⁹ reptendi cor ut accipiat 2/2 cui uīs nūs q̄
duīdat īteḡr ꝑ ꝑ cui cū supaddidēris 7 uēīet nūs q̄ duīdat
īteḡr ꝑ 7 q̄ sīt sīt 7 de 2/2 Sicꝙ nūs ille 8 sīt 2/2 cui .l. sīt 6
adde 7 t q̄b⁹ 2/2 bīz. fi excedꝝ 2/2 bīz. ꝑmi erūt 8 q̄ 8 sīt 2/2
alt̄ī īteḡr nūi. quē īueīet cū mlcauīt dīmidiū de 8 .l. ꝑ ī 7 q̄r
nūs ille ē 12 et qꝝ 2/2 de 8 sīt 7 mīn⁹ de 2/2 de 12 hē ꝑm⁹ hō
bīz. 8 7 fl̄ 12 quor 1/2 .l. ꝑ addit⁹ sīt 8 reddit 12 ꝙ ꝑtō
ꝑmi eq̄. cui q̄b; addit⁹ 7 reddīt 1ꝛ ꝙ ꝑtō fi. sīt qꝝ 2/2 de 16 .l.
12 sīt 7 mīn⁹ de 2/2 de 7 1 pot ꝑm⁹ hō hīre bīz. 16 Et fl̄ bīz.
7 1 Et ꝑm⁹ eq̄ ualerꝫ 7 2 fl̄ 7 4 Et sic posse⁹ īfinitos nūos hīre
ꝙ bīz. uīcūiꝰ cui īfinitꝫ sīt nūi qui sīt ī dcā ꝓportōe .l. qꝝ 2/2 unī
sīt 7 mīn⁹ de 2/2 altī. Et si ꝓtū fi eq̄ eēt 7 plꝰ ꝑtō ꝑmi īueī
tel duos nūos quor 2/2 unī eēnt 7 mīn⁹ de 2/2 altert q̄ nūi sīt
īfinitꝫ sīt. et q̄b⁹ unī ē 7 o alī 7 7 q̄r ꝑm⁹ hēret bīz. 7 o alī 7 7 Et ꝙ
tū ꝑm⁹ eq̄ eēt 7 9 sc̄di 7 2 | De trib; hōib; et tb; eq̄s cū uī pcto
Tꝛe hoīes sīt trel | Alii ꝙ ordinē sc̄dm regulā proportionū.
et eq̄ silr sīt tl quor fl̄ ualeat 7 plꝰ ꝑtō — Et tcī ualeat 7 plꝰ q̄
fl̄ .l. 4 plꝰ q̄ ꝑm⁹. Et ꝑm⁹ hō cū 1/2 bīzor fi hāt ꝓtū ꝑmi equi
sc̄di cū 1/2 bīz. tcij hāt ꝓtū fi eq̄. Tercī cū 1/4 bīzor ꝑmi hē ꝓtū

Vl⁹ ꝑmus	ꝑmi homo
16	8
sc̄dꝰ	sc̄dꝰ
2 1	12
ꝑm⁹ eq̄	ꝑm⁹ eq̄.
2 2	12
sc̄di	sc̄dꝰ
2 7	11

ꝑmus hō cum sc̄di equi	
	ualeat 7 plꝰ ꝑtō
2 0	
sc̄di	
2 7	
ꝑmi eq̄	
2 9	
sc̄dꝰ.	
2 2	

100

tcij equi. Q̃r ūt̃ i integrū bijūthij unūquiq; hōis 7 eq̄. qz p̄mꝰ eū ½ bijz. fi. hz p̄nū p̄mi equi. Cz sedz eū ½ bijz. tcij hz p̄nū fi eq̄. sz gꝫ bijz. p̄mi hōis eū ½ bijz. fi. bijz. z minꝰ de bijz. fi hōis eū ½ bijz. tcij. Q̃r bijz. p̄mi hōis stz z minꝰ de ⅔ bijz. fi. 7 de ½ bijz. tcij. Jz qz stz ½ bijz. tcij hz p̄nū fi eq̄. 7 tcꝰ hō eū ¼ bijz. p̄mi. hz̄ p̄nū tcij eq̄. gꝫ sedz eū ½ bijz. tcij hz z minꝰ q̄ tcꝰ hō eū ¼ bijz. p̄mi vñ bijz. fi hōis stz z minꝰ de ½ bijz. tcij 7 de ¼ bijz. p̄mi. vñ bijz. fi hōis stz z minꝰ de ½ bijz. tcij 7 de ¼ bijz. p̄mi. Q̃r qz tcꝰ hō eū ¼ bijz. p̄mi hz p̄nū tcij eq̄. 7 p̄mꝰ eū ½ bijz. fi hz p̄nū p̄mi eq̄. gꝫ tcꝰ hō eū ¼ bijz. p̄mi hz 4 plꝰ q̄ p̄mꝰ eū ½ bijz. fi. vñ bijz. tcij hōis stz 4 plus q̄ de ⅘ bijz. p̄mi. 7 de ⅖ bijz. sedi. hijs utiq; ītellectis studeat ītuīre ꝓportionē quā hūt bijz. p̄mi hōis ad bijz. fi. sūt ē bijz. p̄mi z minꝰ de ⅔ bijz. fi. 7 de ½ bijz. tcij hōis. Cz qz bijz. tcij hōis stz 4 plus de ⅘ bijz. p̄mi 7 de ½ bijz. fi est ½ de bijz. tcij hōis ½ 1 plꝰ de ¼ bijz. p̄mi 7 de 1/12 bijz. fi. 7 ~~plꝰ de~~ gꝫ bijz. p̄mi hōis stz z minꝰ de ⅔ bijz. fi. 7 ½ plꝰ de ¼ bijz. fuor 7 de 1/12 bijz. fi. Q̃r cr̃cto ½ 1 de z rem̄ebūt bijz. p̄mi hōis minꝰ ½ unꝰ ꝺ bijz. de ⅔ et 1/12 fi hōis 7 de ¼ bijz. fuor. qz ⅘ bijz. p̄mi hōis stz ½ unꝰ bijz. minꝰ de ⅔ et 1/12 .s. de ⅔ bijz. fi. vñ si repiant duo nūi quor ⅘ unꝰ sūt ½ unꝰ bijz. minꝰ de ½ bijz. fuor alt̄ hebit bijz. p̄mi 7 fi hōis. qz nūor ītuīet sic qz ½ unꝰ bijz. fi diuidāt̄ p z utq; nō fiāgt̄ alīq; eripit trib⁹ q̃rtꝰ. Jueīat nūm quor ꝺ ⅘ diuidant̄ integraliꝫ p z eritq; nūt ille 14 eui ⅘ sūt 12 eī quib⁹ adde ½ uī unꝰ bijz. ert ½ 12 q ½ 12 sūt ½ alt̄ integ nūi. quē ītuīet cc 17 eī mlcnūt ½ 12 p 4 7 diuidet p. z gꝫ p̄mꝰ hō hz bijz. 14 et ff 17 Si 17 hūer tcīa ī integrū qua petit ei p̄mꝰ. vñ ītuīet alios duos nūos quor ⅘ unꝰ sūt minꝰ ½ unꝰ bijz. de ½ alteri. et ff nūi diuidat integraliꝫ p z eritq; 20 et 22 gꝫ p̄mꝰ hz 20 sedz 22 quor ½ .s. 11 addita sūt 20 reddit bijz. 1 p ptio p mi eq̄. eī q̃b⁹ adde bijz. z eritq; bijz. 12 p ptio fi eq̄. Cz qz sedz hō eī ½ bijz. tcij hz p̄nū fi eq̄. s. 12 gꝫ diffīt q̃ ē a 22 usq; 12 .s. 10 est ½ bijz. tcij hōis. Q̃r tcꝰ hō hz bijz. 20 eī q̃b⁹ addita ⅘ de bijz. p̄mi hōis. s. de 20 reddūt bijz. 16 p ptio tcij eq̄. Potest ē ītuītoꝫ nūor hūe p bijz. illor eī ītuītu sūt nūi eq̄b⁹ ⅘ unꝰ sūt. ½ unꝰ integ minꝰ de ⅔ alt̄. Cz si ff eq̄ ualeīt z plꝰ 20 ut dirim. 7 tcꝰ ualeīt 1 plꝰ 20. s. 6 plꝰ 20. Jueīet sūt dispositi qz ⅘ bijz. p̄mi ēent ½ unꝰ bijz. minꝰ de ½ bijz. alt̄ de qua re si regłam hūe nūs. eī tcꝰ eq̄ ualeīt 6 plꝰ p̄mo. p̄mꝰ hō 4 sedz 6 tcꝰ 12 p̄mꝰ eq̄. 7 sedz 9 tcꝰ 12 cōsideīa

p̄mꝰ homo
20
sedo
22
tercꝰ
1 0
p̄mꝰ eq⁹
1 1
sedꝰ
1 2
tercꝰ
1 6

Cum tercius equus ualeat 8 plus primo Primus homo

45	
Secundus	
48	
Tercius	
60	
Primus equus	
61	
Secundus	
63	
Tercius	
69	

Cum tercius equus ualeat 10 plus primo

Primus	
40	
Secundus	
42	
Tercius	
46	
Primus equus	
44	
Secundus	
46	
Tercius	
64	

[illegible] $\frac{1}{4}$ [illegible] 4 [illegible] $\frac{1}{4}$ de 6 in [illegible] $\frac{1}{2}$ 1 [illegible] de 2 [illegible] $\frac{1}{2}$ [illegible] $\frac{3}{4}$ [illegible] $\frac{4}{4}$ [illegible] 4 et 6 [illegible] 12 [illegible] 7 [illegible] 9 [illegible] 13 [illegible] 8 [illegible] $\frac{1}{4}$ [illegible] 8 [illegible] 2 [illegible] de 2 [illegible] $\frac{4}{4}$ [illegible] $\frac{3}{4}$ [illegible] 44 [illegible] 48 et [illegible] 61 [illegible] 60 [illegible] 63 [illegible] 69 [illegible] 10 [illegible] $\frac{1}{4}$ [illegible] $\frac{1}{2}$ 2 [illegible] $\frac{1}{2}$ [illegible] de 2 [illegible] $\frac{4}{4}$ [illegible] $\frac{1}{2}$ [illegible] $\frac{3}{4}$ [illegible] 40 et 42 [illegible] 40 [illegible] 42 [illegible] 46 et [illegible] 44 [illegible] 46 [illegible] 64 [illegible]

De quatuor hominibus et quatuor equis per eandem regulam proportionum

[illegible] 4 [illegible] 4 [illegible] $\frac{1}{3}$ [illegible] $\frac{1}{4}$ [illegible] $\frac{1}{4}$ [illegible] $\frac{1}{6}$ [illegible] 2 [illegible] 3 [illegible] 4 [illegible] 4 [illegible] 10 [illegible] 2 [illegible] $\frac{2}{3}$ [illegible] $\frac{1}{4}$ [illegible] $\frac{3}{4}$ [illegible] $\frac{1}{4}$ [illegible] 3 [illegible] $\frac{4}{4}$ [illegible] $\frac{1}{6}$ [illegible] 4 [illegible] 10 [illegible] $\frac{4}{6}$ [illegible] $\frac{1}{3}$ [illegible] 2 [illegible] $\frac{2}{3}$ [illegible] $\frac{1}{4}$ [illegible] $\frac{1}{4}$ [illegible] $\frac{4}{4}$ [illegible] $\frac{1}{6}$ [illegible] $\frac{1}{4}$ [illegible] $\frac{1}{6}$ [illegible] 4 [illegible] $\frac{4}{4}$ [illegible] 2 [illegible] $\frac{2}{3}$ [illegible] $\frac{1}{4}$ 1 [illegible] $\frac{1}{4}$ [illegible] $\frac{2}{3}$ [illegible] $\frac{1}{4}$ [illegible] $\frac{1}{4}$ [illegible] 10 [illegible] $\frac{4}{6}$ [illegible] $\frac{1}{4}$ [illegible] $\frac{1}{4}$ [illegible] 2 [illegible] $\frac{1}{6}$ [illegible] $\frac{1}{14}$ [illegible] $\frac{2}{3}$ [illegible] $\frac{11}{14}$ [illegible] $\frac{1}{6}$ [illegible] 2 [illegible] $\frac{1}{4}$ 3 [illegible] $\frac{1}{6}$ [illegible] $\frac{19}{24}$ [illegible] $\frac{11}{14}$ [illegible] $\frac{1}{4}$ 1 [illegible] $\frac{11}{14}$ [illegible] $\frac{19}{24}$

101

ipsi et sic ipsum addidens $\frac{1}{4}$ 1 facient integrum numerum. qui dividatur per 11
integraliter. eiusque numerus ipse 54 cuius $\frac{19}{24}$ sunt $\frac{3}{4}$ 42 cum quibus addito $\frac{1}{4}$ 1 fiunt
numerus 44 quorum $\frac{1}{11}$ que est 4 minuta per 14 reddet pro alio numero 60 quod primum
habet bis. 54 secundus 60 quorum tercia s. 20 addita cum 54 reddit bis.
7 pro primo primi equi. per quorum inventionem invenies bis. tercii homo est 64 quarti
74 primum sui equi 76 tercii 79 quarti 84 Et nota quod si $\frac{1}{4}$ de
bis. 10 in quibus primum quarti equi excedit primum primi esset equalis de bis. $\frac{1}{4}$ 3
similis remanet $\frac{19}{24}$ bis. primi quantum $\frac{11}{14}$ bis. sui. 7 si esset plus dicta $\frac{1}{4}$
de $\frac{1}{4}$ 3 hoc est quod in loco decenarii exponitur alius alie similis quoniam cadet aliquis
numerus maior de 10 cuius $\frac{1}{4}$ esset plus de $\frac{1}{4}$ 3 tunc remanerent $\frac{19}{24}$ bisorum primi
quantum $\frac{11}{14}$ bis. sui. 7 plus hoc quod esset $\frac{1}{4}$ ipsius numeri magis de bis. $\frac{1}{4}$ 3

Predicta. **De quinque hominibus et totidem equis secundum eadem regulam**

Tres homines sunt quinque 7 equi similiter. Et primus petit secundo. 1 $\frac{1}{3}$ secundus tercio $\frac{1}{4}$ tercius
quarto $\frac{1}{5}$ quartus quinto $\frac{1}{6}$ quintus primo $\frac{1}{7}$ Et sic emat primus primum equum.
secundus secundum equum qui valet bis. 32 plus primo. Et tercius tercius tercium qualiter
bis. 53 plus primo sui. Et quartus emat quartum qui valet bis. 74 plus tercio. Et
quintus homo emat quintum equum qui valet bis. 17 plus quarto s. bis. 17 plus primo.
Invenies quidem ordine demonstrato qualiter bis. primi sunt bis. 2 minus de
$\frac{2}{3}$ bisorum sui 7 de bis. $\frac{1}{4}$ bis. tercii. Et qualiter bis. secundi sunt 3 minus de
$\frac{3}{4}$ bis. tercii 7 de $\frac{1}{5}$ bis. quarti 7 qualiter bis. tercii homo sunt bis. 5 minus de
$\frac{4}{5}$ bis. quarti 7 de $\frac{1}{6}$ bis. quinti 7 et qualiter bis. quarti homo sunt bis. 7
minus de $\frac{5}{6}$ bis. quinti 7 de $\frac{1}{7}$ bis. primi. Et qualiter bis. quinti homo sunt
bis. 17 plus de $\frac{6}{7}$ bisorum primi 7 de $\frac{1}{3}$ bis. sui. Tunc studebis redigere
$\frac{1}{4}$ bisorum tercii in partes bis. primi 7 sui. Sed est omnis bis. tercii homo 5 minus
de $\frac{4}{5}$ bis. quarti 7 de $\frac{1}{6}$ bis. quinti. Quare $\frac{1}{4}$ bisorum tercii sunt $\frac{1}{4}$ 1 minus de $\frac{1}{4}$
bisorum sui 7 $\frac{1}{4}$ 1 de minus de $\frac{1}{5}$ bis. quarti 7 de $\frac{1}{24}$ bis. quinti. hoc est bis.
primi homo sunt $\frac{1}{4}$ 3 minus de $\frac{2}{3}$ sui 7 de $\frac{1}{5}$ quarti 7 de $\frac{1}{24}$ quinti. Sed est omnis
bis. quarti homo 7 minus de $\frac{5}{6}$ bisorum quinti 7 de $\frac{1}{7}$ bisorum primi. Quare
$\frac{1}{5}$ bisorum quarti sunt $\frac{2}{5}$ 1 minus de $\frac{1}{6}$ bisorum quinti 7 de $\frac{1}{35}$ bis. primi.
Ergo bis. primi homo sunt $\frac{1}{4}$ 3 et $\frac{2}{5}$ 1 s. $\frac{13}{20}$ 4 minus de $\frac{2}{3}$ bis. sui 7 de
$\frac{1}{24}$ et $\frac{1}{6}$ bis. quinti 7 de $\frac{1}{35}$ bisorum suorum. Quare si contra auferatur
$\frac{1}{35}$ bisorum primi sunt $\frac{34}{35}$ bisorum eius erunt bis. $\frac{13}{20}$ 4 minus de $\frac{2}{3}$ bis.
sui 7 de $\frac{5}{24}$ bis. quinti. Et quoniam omnis bis. quinti homo sunt 17 plus de $\frac{6}{7}$
bis. primi 7 de $\frac{1}{3}$ bis. sui. Ergo $\frac{5}{24}$ bisorum quinti erunt $\frac{5}{24}$ de bis. 17 s.
bis. $\frac{13}{24}$ 3 plus de $\frac{5}{24}$ de $\frac{6}{7}$ bisorum primi 7 de $\frac{5}{24}$ de $\frac{1}{3}$ bisorum secundi
Nam $\frac{5}{24}$ de $\frac{6}{7}$ bisorum primi sunt $\frac{5}{28}$ bisorum ipsius et $\frac{5}{24}$ de $\frac{1}{3}$ bis. sui
$\frac{5}{72}$ sunt ipsius. Quare $\frac{34}{35}$ bisorum primi sunt bis. $\frac{13}{20}$ 4 minus de $\frac{2}{3}$ bis. secundi
7 plus $\frac{13}{24}$ 3 de $\frac{5}{28}$ bis. ipsius 7 de $\frac{5}{72}$ bisorum sui. Quare erunt $\frac{5}{28}$ bisorum
primi de $\frac{34}{35}$ bisorum ipsius. remanebunt $\frac{111}{140}$ eius qui $\frac{111}{140}$ sunt $\frac{13}{20}$ 4

Primus homo
54
Secundus
60
Tercius
64
Quartus
74
Primus equus
74
Secundus
76
Tercius
79
Quartus
84

quarti et de $\frac{1}{24}$ bisorum quinti ergo bisorum
primi homo sunt 3 minus de $\frac{2}{3}$ bisorum

Prim' homo	Prim' equs
1489	c 160
Scds	Scds
1712	c 162
Terc'	Terc'
1736	c 164
Quart'	Quart'
1864	c 170
Quint'	Quint'
1940	c 177

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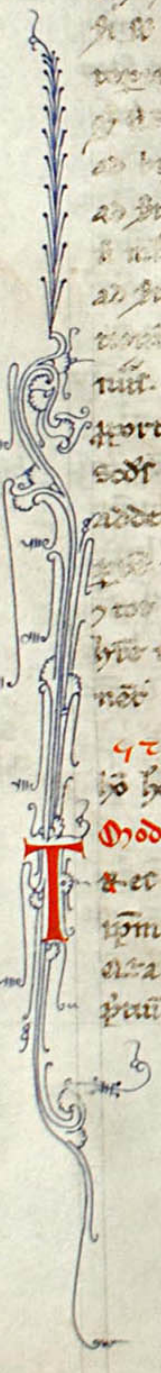
er mlcam 1/4 t ipox p 7 t nō faciant integrū nūm op' nūm sī t 7 6
addere t 71 semel bis 7 don' pcrec' nūs d' 111/1440 et 12/120 addinf. et ml'
ei 1/4 t ipox p 7 t faciat integrū nūm. Vñ si sī t 7 6 addider' ē t 71
.f. 111 t ueient 1489 quox 111/1440 acceptis eis 7 sīaddito 12/120 et
eox 1/4 t mlcam p 7 t pcreant p so nūo 1712 g' p'm' hō hī 1489
scds 1712 quox 1712 tcia ptc.f. 471 addita ē bīz. p'mi hoīs.f. cū
1489 ueīt c 160 p' tcio p'mi eq'. q'r p'tiū si eq' eīt c 162 p'tiū q'p tcij
c 164 p'tiū q'rti c 170 p'tiū q'nti c 177 Et tcī hō hab 1736
q'rtus 1864 q'nt' 1940 Modus aluf ad cū unquiq; pet duo bul
natos hoies binubios hūer Mox p. ordinē iqō quatiō hoīū et uni eq
equū eīne uoluer'. et q'bz p'm' pet so 7 tcio hoi 1/2 scds tcio 7 q'rto
pet 1/12 tcī q'rto 7 p'mo q'rto 1/4 Q're q' p'mo 7 so q'rto 1/6
suox bīz. 7 sio unq'sq; ꝓport ipm eīne equū. Q're p'm' cū 1/2 bīzox
si 7 tcij hoīs. ꝓport ipm eīne equū. sīc s'c cū 1/3 bīz. tcij 7 q'rti. Et sīc
tcī hō cū 1/4 bīzox q'rti 7 p'mi. Et sīc q'rt' cū 1/6 bīz. p'mi 7 si. g' p'm' cū
1/2 bīz. si 7 tcij hī tm q'ntū s'c cū 1/3 bīz. tcij 7 q'rti. 7 q'ntū tcī cū 1/4
bīz. q'rti 7 p'mi. 7 q'ntū q'rt' cū 1/6 bīz. p'mi 7 si. Et q'm p'm' cū 1/2 bīz.
si 7 tcij hī q'ntū s'c cū 1/3 bīz. tcij 7 q'rti. Si de so auferat 1/2 bīzox suox
remanebit p'm' cū 1/2 bīz. tcij. equal de 2/3 bīzox si cū 1/3 bīzox tcij
7 q'rti. Vñ si de 1/2 bīzox tcij auferat 1/3 bīz. tcij. remanebit p'm' cū 1/12
bīz. tcij equal de 2/3 bīz. tcij cū 1/3 bīz. q'rti. Silr eisdē dispoīt inuēiet sm
hoīē hīe cū 1/20 bīzox q'rti. q'ntū tcī cū 1/4 bīz. p'mi. Et tīa inuēiet
tciū hoīē cū 1/20 bīzox p'mi hīe q'ntū q'rt' hō 1/6 cū bīz. si. Jē q' q'rt'
cū 1/6 bīzox p'mi 7 si. hī q'ntū p'm' cū 1/2 bīzox si 7 tcij. Si de p'o au
ferat 1/6 bīzox suox remebit q'rt' cū 1/6 bīzox si equal de 4/6 bīzox
p'mi. cū bīz. 1/2 bīzox si 7 tcij. Q're si de 1/2 bīzox si auferat 1/6
bīzox ipi. remeb q'rt' hō equal de 4/6 bīzox p'mi 7 de 1/6 bīzox tcij. bīzox si erd 1/2
Rursꝰ q' p'm' cū bīz. 1/12 bīzox tcij hī q'ntū 2/3 bīz. si cū 1/3 bīzox
q'rti. hāc 1/3 bīzox q'rti rediget i pātes p'mi 7 si sic. q' o'nis bīz.
q'rti hoīs s'c 4/6 bīzox p'mi et 1/6 bīzox si 7 1/2 bīzox tcij. g'
q'rta pars bīzox q'rti ē 1/3 de 4/6 .f. 4/12 bīzox p'mi et 1/3 0/6 bīz.
si.f. 1/12 et 1/3 s 1/6.f. 1/12 bīzox tcij. g' bīz. p'mi hoīs cū 1/12 bīzox
tcij sī 2/3 et 1/12 bīz. si et 1/12 bīzox tcij et 4/12 bīz. p'mi. remebit 12/12 suox ꝑ si er ūnq; pīa relīquat 1/12
= 1/12 2/3 bīzox p'mi equales de.f. de 12/12 bīz. si. Q're inuēiendi sī duo nūi q'r 12/12 bīzox tcij et 4/12 bīzox
uni sīc 12/12 alt'. erūt 17 et 19 q'r bīz. p'mi hoīs sī a bīz. si i
ipa ꝓportē 7 qua sī 17 ad 19 deīn ut inuēiat ꝓportio quā p'm'
f'c hī ad bīz. tcij. cōsiderabit qualr p'm' cū 1/2 bīz. si 7 tcij hoīs sī
q'ntū bīz. tcij hoīs cū 1/4 bīz. q'rti 7 p'mi ut supi demōstratum. q'r
si auferat cōit 1/2 bīz. tcij 7 1/4 bīz. p'mi. remebit 1/4 bīzox p'mi cū

$\frac{1}{3}$ bizon. fi equales de $\frac{2}{3}$ bizon. tercij et de $\frac{1}{4}$ bizon. quarti. Ostensum est autem quod biz. quarti hominis sunt $\frac{5}{6}$ bizon. primi et de $\frac{1}{6}$ bizon. fi et $\frac{1}{3}$ bizon. tercij. quare $\frac{1}{4}$ bizon. quarti est $\frac{1}{4}$ de $\frac{5}{6}$ s. $\frac{1}{6}$ bizon. primi et est $\frac{1}{4}$ $\frac{0}{6}$ s. $\frac{1}{30}$ bizon. secundi et $\frac{1}{4}$ de $\frac{1}{3}$ s. $\frac{1}{14}$ bizon. tercij. Et quia $\frac{2}{3}$ bizon. tercij cum $\frac{1}{4}$ biz. quarti est quantum $\frac{1}{4}$ biz. primi cum $\frac{1}{3}$ biz. secundi ergo b $\frac{2}{3}$ bizon. tercij cum $\frac{1}{6}$ biz. primi et cum $\frac{1}{30}$ bizon. fi et cum $\frac{1}{14}$ bizon. suorum s. tercij sunt quantum $\frac{1}{4}$ bizon. primi cum $\frac{1}{3}$ bizon. fi. verum $\frac{1}{14}$ $\frac{2}{3}$ bizon. tercij sunt $\frac{11}{14}$ bizon. ipsius. Et $\frac{11}{14}$ bizon. tercij cum $\frac{1}{6}$ bizon. primi et cum $\frac{1}{30}$ bizon. fi sunt quantum $\frac{1}{4}$ bizon. primi cum $\frac{1}{3}$ bizon. secundi. Quare si de $\frac{1}{4}$ bizon. primi auferatur $\frac{1}{6}$ bizon. ipsius remanebunt $\frac{19}{30}$. Similiter si de $\frac{1}{3}$ bizon. fi auferatur $\frac{1}{30}$ bizon. ipsius remanebunt $\frac{9}{30}$. Unde $\frac{11}{14}$ bizon. tercij sunt $\frac{19}{30}$ bizon. primi et $\frac{9}{30}$ b. fi. remanebunt. Et quia $\frac{19}{24}$ bizon. primi sunt $\frac{17}{24}$ bizon. secundi. Et quia partes ipsorum sunt ex eodem numero s. de 24 erunt similiter 19 partes quelibet bizon. primi 17 partes ex eisdem partibus bizon. fi. Quare $\frac{19}{30}$ bizon. primi sunt $\frac{17}{30}$ bizon. fi et quia $\frac{11}{14}$ bizon. tercij sunt $\frac{19}{30}$ bizon. primi et $\frac{9}{30}$ bizon. fi erunt similiter ipse $\frac{11}{14}$ bizon. tercij $\frac{17}{30}$ bizon. fi et $\frac{9}{30}$ bizon. secundi. Verum $\frac{17}{30}$ et $\frac{9}{30}$ biz. fi sunt $\frac{26}{30}$ s. $\frac{13}{14}$ bizon. ipsius ergo $\frac{13}{14}$ bizon. fi sunt $\frac{11}{14}$ biz. tercij. Quare reperiendi sunt duo numeri quorum $\frac{13}{14}$ unius sunt $\frac{11}{14}$ alterius erunt 11 et 13 quia 11 est ad 13 ut biz. fi hominis sunt ad biz. tercij. Sed est et biz. fi hominis ad biz. primi ut 19 est ad 17. Quare reperiendi sunt duo tres numeri quorum primus sit ad secundum sicut 17 est ad 19 et secundus ad tercium sicut 11 est ad 13 quos invenies si multiplicabis proportionem quam secundus habet ad tercium per numerum proportionis quam primus habet ad secundum s. 11 per 17 erunt 187 qui est primus numerus. Deinde multiplicabis numeros proportionum quas secundus numerus habet ad primum et tercium s. 19 per 11 erunt 209 qui est secundus numerus. Rursus multiplicabis numeros proportionis quam secundus habet ad primum s. 19 per numeros proportionis quam tercius habet ad secundum s. —— per 13 erunt 247 ergo primus homo habet 187 secundus 209 tercius 247. Et quia primus homo petit secundo et tercio $\frac{1}{3}$ bizon. suorum adde biz. fi et tercij in unum s. 209 et 247 erunt biz. 456 quorum tercium [illegible] s. 152 adde sunt biz. primi hominis s. sunt 187 erunt biz. 339 et tot biz. valuit equus. Rursus quia secundus cum $\frac{1}{4}$ bizon. tercij et quarti hominis proponit habere ipsos biz. 339 s. primum equum extrahe biz. fi hominis de 339 remanent 130 qui sunt quartum de biz. tercij et quarti hominis. Quare quadruplum de 130 s. 520 habent inter tercium et quartum hominem. Ex quibus 520 cum tercius habeat 247 quartus homo habebit biz. 273 qui sunt biz. 247 usque in 520



Primus 187
Secundus 209
Tercius 247
Quartus 273
Equus 333

Modus alius de emptione equi inter tres homines secundum regulam proportionum

Tres homines equum emere volentes. Primus et secundus petunt tercio homini $\frac{1}{3}$ et proponunt ipsum emere equum. Secundus quoque et tercius petunt primo $\frac{1}{4}$ tercius et primus petunt secundo $\frac{1}{4}$ alia primus et secundus cum $\frac{1}{3}$ bizon. tercij habent quantum secundus cum $\frac{1}{4}$ biz. tercij primi s. primum equum. Si communiter auferatur $\frac{1}{4}$ bizon. primi et $\frac{1}{3}$ biz. tercij remanebunt

de quatuor hominib;

bīs. 14 p̄mi cū bīs. 18 sēdi erūt 22 cū quib; adde 1/2 bīsōr tcij. s. 4
hebit 28 p̄ p̄mo eq̄. De quaq; hominib; et uno equo cū tuel penē unū
Rrē hoīes sit q̄nq; et p̄m̄ et sēd̄ eor secundum regulam proportiōn
tcēl petūt q̄rto hoi 1/4 s. ū 7 tcēl et q̄rē petāt q̄nto 1/4 tcēl nāq; 7
q̄rē 7 q̄nē petāt p̄ 1/6 rē quidē et q̄uē 7 p̄m̄ petāt fo. 1/2 q. ut ū
et p̄m̄ et sēd̄ petāt tcio 1/8 7 apponāt ipm equū emē. q̄m p̄m̄ cū
fo 7 tcio et cū 1/2 bīsōr q̄rti hē q̄ntū sēd̄ 7 tcēl 7 q̄rē cū 1/4 bīs. q̄nti.
si cōit auferunt sēd̄ 7 tcēl et 1/2 bīsōr q̄rti. remanebit p̄m̄ equal de
1/2 bīsōr q̄rti cū 1/4 bīsōr q̄nti. si de reliq; hperit tuel fm hē
1/4 bīsōr q̄nti et 1/6 bīs. p̄mi. et tcēū hē 1/6 bīsōr p̄mi et
1/7 bīs. fi. et q̄rtū 1/7 bīs. fi et 1/8 bīsōr tcij. et tuel filr q̄nti
hoīe hē 7/8 bīsōr tcij et 1/2 bīs. q̄rti. et q̄m p̄m̄ hē 1/2 bīsōr
q̄rti et 1/4 bīsōr q̄nti. et q̄rē hē 1/4 bīsōr fi et 1/8 bīs. tcij. et
g̃ 1/2 bīs. q̄rti 1/2 de 1/7 bīsōr fi et 1/2 0/8 .s. 1/2 bīsōr tcij. slā
1/2 de 1/7 bīs. fi sē 2/14 bīsōr tpi. g̃ p̄m̄ hē 2/14 bīsōr fi et 1/2
bīs. tcij et 1/4 bīs. q̄nti. et q̄m bīsarthij tcij hoīe sē 1/6 bīsōr p̄mi
et 1/7 bīs. fi g̃ 1/14 bīsōr tcij erū 1/14 de 1/6 bīsōr p̄mi et 1/12
de 1/7 bīs. fi. slā 1/14 de 1/6 bīsōr p̄mi sē 1/84 bīs. tpi —— et 1/12
de 1/7 bīs. fi sē 1/168 bīs. tpi. g̃ p̄m̄ hē 2/14 et 1/168 bīsōr fi et 1/84
bīs. suōr et 1/4 bīsōr q̄nti. q̄ ū cōit auferat 1/84 bīsōr p̄mi
remanebū 40/84 bīsōr l equalē de 2/14 et 1/168 bīs. fi 7 de 1/4 bīs.
q̄nti. sz 2/14 et 1/168 bīs. fi sē 21/168 bīsōr tpi. g̃ bīsōr 40/84
bīsōr p̄mi sē 21/168 bīsōr fi et 1/4 bīsōr q̄nti. ſ. ut q̄ bīs. sēd̄
hoīs sē 1/4 bīsōr q̄nti et 1/6 bīs. p̄mi. g̃ 21/168 bīsōr fi sē 21/168
de 1/4 bīsōr q̄nti 7 de 1/6 bīs. p̄mi. slā 21/168 de 1/4 bīs. q̄nti sē
21/140 bīsōr tpi et 21/168 de 1/6 bīs. p̄mi sē 7/84 bīs. tpi g̃ 40/84
bīsōr p̄mi sē 21/140 et 1/4 bīsōr q̄nti et 7/84 bīsōr suōr. q̄b 7/84
ertuctus de 40/84 bīsōr p̄mi remanebū 42/84 .s. 1/2 bīsōr p̄mi eqlr
de 21/168 7 de 1/4 .s. de 20/140 bīsōr q̄nti. q̄ repiet duos nūos quos
1/2 uni sūt 20/140 alti eqūleabit g̃ 16 p 29 et 140 p 17 et
cuitab 1/8 et utrūq; mlcatōne cū possibile sit 7 hebit p p̄mo nūo 48
et 64 p fo. s. p bīs. q̄nti hoīs. sz q̄ p̄mo hoi petit 1/6 et qua 48
nō pit n 1/2 mleabit utrūq; nūm. p 2 7 hebit 174 p bīs. p̄mi hō
et 194 p bīs. q̄nti. et q̄m bīs. p̄mi hoīs 1/2 bīs. q̄rti 7 1/4 bīs.
q̄nti. sū 1/4 bīsōr q̄nti. s. 29 auferat de bīs. p̄mi. s. de 174 re
manebū 174 p 1/2 bīsōr q̄rti. q̄ mleab 174 p 1 et
diuidet p 2 eribū 180 p bīs. q̄rti hoīs. sē q̄ sī hē 1/4 bīsōr
q̄nti et 1/6 bīs. p̄mi acē. 1/4 de 194 .s. 146 et adde cū 1/6 de 174
.s. cū 29 7 hebit 184 p bīs. si hoīs. ſ. ut q̄ tcēl hō hē 1/6 bīsōr

ꝑmi er ½ bizoꝝ fr. acc. ⅝ de 171 que ſſ 14 4 et adde ipa cū ½ de 18 4 7 hebis ⅞ 171 ꝑ biz. tcij. qui cū ñ ſint ī integrū mlcab omīt nūor ſuetor ꝑ 7 7 hebis ꝑ biz. ꝑmi hoīs 12 18 et ꝑ biz. ſcdi 12 9 4 et ꝑ biz. tcij 12 0 0 et ꝑ biz. q̄rti 12 60 et ꝑ biz. q̄nti 12 6 4 deīn ut hꝰ ꝑnū equi. adde biz. ꝑmi cū biz. fi et cū biz. tcij erūt 7 7 12 cū q̄b adde ½ de biz. q̄rti hoīs. l. 7 1 4 erūt biz. 14 0 7 8 qui ſſ ꝑnū eq̄.

Sunt ītm tres hoīes bizoꝝ hūes qui equū emere acupiscūt. Et cū nllꝰ illoꝝ ipm emere posſt. ꝑmꝰ petat reliq̄s duob hoīb ½ suoꝝ bizoꝝ. Et ſſ petat ¼ bizoꝝ reliquoꝝ duob duoꝝ hoīnū. Silr tcius petat ¼ reliq̄s 7 sic ꝓpetur uniq̄s ipm emere equū. Describatur ½ ¼ ⅛ de positōe ꝑma. et extrahat 1 q̄ ē ſſ 7 de ipis 7 remanet 7 ſſ que ponat ipm 1 cū ungula ut faciat ⅛ ſcē extrahat 1 q̄d ē ſſ 4 de ipis 4 remanet 7 ſſ q̄ ponat ibi 1 cū ungula et faciet ½ scd extrahe 1 q̄d ē ſſ 4 de ipis 4 remanet 4 ſſ que pōe 1 cū ungula 7 faciet. ¼ Post h pōe ī ordine ¼ ½ ⅛ et nocet de positōe ꝑa. Et inde ī quo nūo repiunt ipē. l. in 12 que mlcat ꝑ 7 ꝑme positois erūt 76 que diuide ꝑ 7 ſe posi nonis eribit 18 que ſua. ſcē mlcat eadē 12 ꝑ 4 ꝑme positois. et diuide ꝑ 7 ſe eribit 16 q̄ adde cū 1 ꝑ et cū 16 erūt 4 9 q̄ ſſ ſūma bizoꝝ illoꝝ tū hoīnū. deīn extrahat unꝰ hō de ipit tbz remanet 7 ꝑ q̄ mlcat eadē 12 erūt que 7 4 q̄ extrahe de 4 9 remanet 7 9 q̄ ſſ ꝑnū equi. Post hec mlca ꝓſcpti 7 4 ꝑ 1 q̄d ē ſſ 7 ſe positois 7 diuide ꝑ ipa 7 eribit 12 q̄ extrahe de 7 9 .s. de ꝑno eq̄ remanet 12 et tot hūit ꝑmꝰ. ſcē mlca eadē 7 4 ꝑ 1 q̄ ē ſſ 7 eadē ſe positois 7 diuide ꝑ eadē 7 eribit 8 a q̄b usq; ī dcm 7 9 dese 17 et tot hūit scdꝰ. adhuc mlca 7 4 ꝑ 1 q̄ ē ſſ 4 ſe positois 7 diuide ꝑ 4 eribit 6 a q̄b usq; in 7 9 dese 13 et tot hūit tcꝰ.

Et ſi hoīes ccnt. uniq; ꝑmꝰ illoꝝ peteꝛ reliq̄s tbz medietatē suoꝝ bizoꝝ. et ſſ peteꝛ tcia reliq̄s. et tcius peteꝛ q̄rtā reliq̄s. 7 q̄rtꝰ peteꝛ q̄ntā reliq̄s. hꝰ ē positōe ꝑ ſtam regłam repiet uidelt ut describat ī ordine ¼ ⅛ ⅛ ½ et nocta bis erit de positōe ꝑa. deīn extrahat tigām que ē ſſ unāq; ungłam de tigā que ē tb eadē ungła. faciens et eis sedm positōes l. ⅛ ⅛ ½ 1 deīn uideat ⅛ ⅛ ½ 1 ī quo nūo repiunt. l. ī 12 Q ſſ mlcabis 12 ꝑ 7 ꝑe positois erūt q̄ 74 que diuide ꝑ 1 ſe eribit 74 q̄ ſua 7 mlti plica eadē 12 ꝑ 7 ꝑe positois 7 diuide ꝑ 7 ſe eribit 18 q̄ ſua mlcans 12 ꝑ 4 ꝑme positois 7 diuidens ꝑ 7 ſe eribit 16 addes inuicē 74 et 18 et 16 et 14 erūt 77 que ſſ ſūma bizoꝝ illoꝝ

De eodem inter iiii homines

Modus aliꝰ de tribꝰ hominib; et uno equo cum unāq; petat reliquis portiē

ꝑmus
12 18
Scdꝰ
12 9 4
tercius
12 0 0
Quartꝰ
12 6 0
Quintꝰ
12 6 4
equs
14 0 7 8

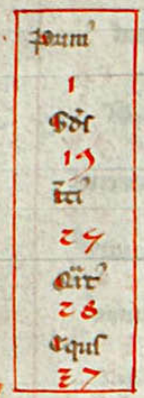
positio ꝑma
⅛ ¼ ½
positio scda
¼ ½ ½

Item mlca ꝓſcpti 12 ꝑ 9 ꝑe positois. et diuide ꝑ 4 ſe eribit 14.

ꝑmus
12
Scdꝰ
17
tcꝰ
13
equs
29

ꝑma positio ꝑma
⅛ ¼ ½ ½
Scda
¼ ½ ½ 1

Q ſua. et iiii multiplica 12 ꝑ 9 ꝑme positois et diuide ꝑ 4 ſe eribit 14.



Primus
1
Secundus
19
Tercius
24
Quartus
28
Equus
37

iiij^or hominum. deinde extrahe 1 de illis iiij^or hominibus remanent 3 per que multa 12
prescripta erunt 36 que extrahe de 73 remanent 37 et tot valuit equus.
Deinde divide prescripta 36 per 1 fere positionis exibunt 36 que extrahe de 37
remanent 1 et tot habuit primus. Postea vero accipe dimidium de 36 per $\frac{1}{2}$ fere po-
sitionis s. 18 et extrahe de 37 remanent 19 et tot habuit secundus. Deinde accipe
$\frac{1}{3}$ de 36 per ipsam $\frac{1}{3}$ que est in fera positione. Et extrahe de 37 remanent 24
et tot habuit tercius. Rursus per $\frac{1}{4}$ que est in fera positione accipe $\frac{1}{4}$ de 36 s. 9 que
extrahe de 37 remanent 28 et tot habuit quartus. ¶ Quia si tamen hec re-
gula procedat nosse volumus. Considera igitur quod cum primus homo petat reliquas $\frac{1}{2}$ ipsorum
bizontorum cum habeat ipsam medietatem. Non habet amplius quam primum equum. Igitur remanent reliquis
tribus s. secundo et tercio et quarto a primo equi usque in summa omnium bizontorum illorum iiij^or hominum.
Et cum secundus habeat $\frac{1}{3}$ bizontorum reliquorum trium hominum et non habet tantum nisi tantum primum
equum. Igitur reliquis tribus s. primo et tercio et quarto remanet hoc idem quod est inter primum equum
et summam bizontorum illorum iiij^or. Similiter cum tercius homo habuit $\frac{1}{4}$ bizontorum reliquorum trium
hominum et habuit tantum primum equi reliquis tribus s. quarto et primo et secundo remanet
illud idem quod est a primo equi usque in summa bizontorum illorum iiij^or. Propter eandem primo
et secundo et tercio remanet idem quod est a primo equi usque in summam prescriptam. Videlicet da-
ta quantitate illorum bizontorum quarto homini. Igitur cum quilibet illorum petat et sua petitione
ab ipsis recepta remanet eis una et eadem quantitas s. una que est a primo
equi usque in summam omnium bizontorum illorum iiij^or hominum. Post hanc itaque consideratione
describe petitiones eorum in ordine sic $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$ de quibus superius fecimus
primam positionem. Nota considera quam partem quilibet tres illorum tribuant suo pe-
titori ex hoc quod eis remanet. Quod sic considerandum est cum secundus et tercius et quartus tribuant
suo petitori videlicet primo medietatem ipsorum bizontorum. Igitur si ipsi habent duos bizontes
dant ei 1 et remanet eis alius. Igitur dant quantum remanet eis. Quare scribitur superius in
principio secunde positionis 1. Item cum tercius et quartus et primus tribuant secundo homini $\frac{1}{3}$ suorum bizontorum
ut ipse petit eis. Igitur si ipsi habent bizontes 3 dant ei 1 ex ipsis tribus bizontibus
et remanent eis 2 et dant medietatem eius quod remanet eis. Quare describitur $\frac{1}{3}$
in fera positione sub $\frac{1}{3}$ prime positionis ut in descriptione ostenditur. Item cum quartus et
primus et secundus tribuant tercio homini $\frac{1}{4}$ ipsorum bizontorum sicut ipse petit eis. Igitur si ipsi tres
habent bizontes 4 dant ei ex ipsis per quarta parte et remanent eis bizontes 3 Igitur dant
terciam ex eo quod eis remanet. Quare describitur $\frac{1}{3}$ in fera positione sub $\frac{1}{4}$ prime po-
sitionis. Rursus cum primus et secundus et tercius tribuant quarto homini $\frac{1}{4}$ bizontorum eorum ut ipse petit
eis. Igitur si ipsi tres habent bizontes 4 dant ei ex ipsis per quinta parte et remanent eis
bizontes 3 Igitur dant $\frac{1}{4}$ ex hoc quod remanet eis. Et ideo describitur $\frac{1}{4}$ in fine secunde
positionis ut in prescripta descriptione demonstratur. Deinde quia manifestum est residuum
quod remanet quibuslibet tribus hominibus illorum post datam petitionem quarta eorum petitoris
semper est idem. Ponamus ut ipsum residuum sit 12 ideo quia in 12 reperiuntur par-
tes fere positionis s. $\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$ 1 Et quia iam manifestum est quod secundus et tercius et quartus homo

¶ dant primo

silr. 7 8 p bis qrti hois. Et sic p eandē gradientes potis qlibz silet qo
nes sū tū sū plū facillime denodare. Si qz nb grauissimū ē singla singlis
demōstrationib demōstrare. aliaſ h mōi qoes i sequentib tm pōrē datum
reglam te docebim denodare. Questio alia de iiii hominb.

Proponam ē alia. uij. hoiem hoīm qstionē ut q dca sit i sua regla ap
ti intelligāt. Ut si dicat. sr. uij. hoies equū emē uolentes. Et p̄m
petat alys tb hoib 1/4 eoz bizoz. Et alt petat reliqt tbz 1/8 Et
tcī petat 1/11 Qrt qnt reliqt 6/19 desceptus unaq p ordinē
6/19 1/11 1/8 1/4 i qb gradet pa posito. Et ertuhat unq̄sq nūor q
sr sup ugul de nūo ei ertenti sb ugula. 1. 7 de 4 et 7 de 8 et
1 de 11 et 6 de 19 remanebt 7 et 4 et 7 et 1 7 srqb
ponant ugule et sr 7 ponant 7 sup 4 ponant 7 et sr
7 ponat 1 et sr 17 ponat 6 7 hebunt p sa positōe
6/17 1/7 1/4 1/7 que sr tres p ordinē q dant tres hoies eoz petitori de
hys que remanet eis. sicut i p̄cedēti demōstratōe demōstrauim. Et
p̄ce sum positōis sb pa. ut mli ostendit. Dein uide i q nūo ipi rup
ti se positōis replant. replunt ē i 17 6 4 dein mlca 17 6 4
p 4 que sut sub p̄ma ugla p̄me positōis. et diude p 7 q sr
sub p̄ma ugula se positōis eribt 7 7 4 q fua. Jtem mlca 17 6 4
p 8 de pa positōe. et diude p 4 eribūt 7 1 8 1 Rurs mlca
1 7 6 4 p 11 p̄me 7 diude p 7 sede eribt 7 1 1 4 adhuc
mlca 1 7 6 4 p 19 7 diuide p 17 eribūt 1 9 9 4 q adde
cū 7 7 7 4 et cū 7 1 8 1 ert 8 4 9 9 q sut suma cuiusq bis.
illoz. Postea q hoies sr. uij. 7 un illoz sep petit reliqt ertuhant
de 1 remanet 7 i quib mlcet 17 6 4 ert 1 0 9 4
qui nūs ē illud residuū qd sep remanz qbzbz tb illoz. Post ēptio
nē equi que ertuhant de 8 4 9 9 remanēt 1 4 0 1 p p̄tio eq
Dein ut hal bizātiol p̄mi hois p 1/7 que sr i sa positōe. acē. 1/7
de 1 0 9 4 eribūt 7 7 7 0 q ertuhe de p̄tio eq. de 1 4 0 1
remanēt 1 7 7 1 7 tot hūt p̄mi. Jte ut hal biz. sc. acē. 1/4 de
1 0 9 4 p 1/4 que sr i sa positōe ert 7 1 4 7 q ertuhe de
1 4 0 1 remanēt 7 0 1 7 7 tot hūt sedi. Rurs p 1/7 se posi
tionis acē. 1/7 de 1 0 9 4 q hūt 7 7 1 0 7 ertuhe ea de 1 4 0 1
remanēt 7 1 6 1 7 tot hūt tcī. Jtem acē. 6/17 de 1 0 9 4 q sr
1 8 9 0 7 ertuhe ea de 1 4 0 1 remanēt 7 6 1 1 7 tot
hūt qrti. 5 Possum hoc idē p aliā reglam p̄mo operi. uide
hez eū sedi ho 7 tcī 7 qrti dat p 1/4 remanēt eis 1/4 bizoz suoz
que 1/4 sr residuū qd ē a p̄tio eq i sūmā bizoz. uij. hoīm. Jte eū
reliq dat so 1/8 remanēt eis 5/8 bizoz q sr idē residuū. Rurs eū

p̄mo p̄ma
6/19 1/11 1/8 1/4
soda
6/17 1/7 1/4 1/7

Equs
1 4 0 1
p̄m
1 7 7 1
sedi
7 0 1 7
tcia
7 1 6 1
Quart
7 1 6 1

reliqui dant tcio $\frac{4}{11}$ remanet eis $\frac{7}{11}$ p eode residuo. adhuc e relq
dant qrto hoi $\frac{6}{19}$ remanet eis p residuo sto $\frac{12}{19}$ g $\frac{7}{4}$ byzoy tedi
7 tcij 7 qrti. se qntu $\frac{5}{8}$ byzoy tcij 7 qrti 7 pmi hoil 7 qntu qrti 7 $\frac{7}{11}$ =
pmi 7 fi 7 qntu $\frac{17}{19}$ byzoy pmi fi 7 tcij hoil. Q r repiendi se. nij.
nu quoy pmi sue qntu fi $\frac{5}{4}$ pmi sue qntu $\frac{5}{8}$ fi 7 qntu $\frac{7}{11}$ qrti
7 pmi 7 fi 7 qntu byzoy tcij et qntu $\frac{17}{19}$ qrti nu. Crr 7 7 4
er 7 1 8 f er 7 1 f 4 er 1 9 9 4 sic i fi parte h capti
silet ptiones decuim ueire. Cr quib. nij. nul pmi e suma byzoy fi.
7 tcij 7 qrti hoil. sedt nul tcij 7 qrti 7 pmi hoil. tci nul e suma qrti
7 pmi 7 fi hoil. Q rr nul e suma byzoy pmi 7 fi 7 tcij hoil. Q r npi
nij. nu i unu gueci. reddt 8 4 9 9 qui nul e tplu sume byzoy
npoy. nij. eu quilby npoy sit e i ipo gputat. Q r suma npoy. nij. e t
ea pars ubi nu. Sz eu iste nul p inariu integre ni diuidat. 7 nos ue
lim tanos omis hre nuos. retinem 8 4 9 9 p suma npoy. nij. Q r
tres illoy p ordine debt triplu decoy nuoy. s. ff 7 tci 7 qrti hs
6 8 7 4 tci 7 qrti 7 pmi. 6 4 4 7 Q rr 7 pmi 7 sedt 6 f 7 4
pmi 7 sedt 7 tci. 4 9 8 4 Cr qm suma npoy. nij. e 8 4 9 9 de q
sedt 7 tci 7 qrti hs hnt 6 8 7 4 g residuu qe me ucp. s. 1 7 7 f
hre pmi. pp qd si errarim 6 4 4 7 de 8 4 9 9 remanet p bfr.
fi hoil 7 0 f 7 silr exteto nuo tcio 7 qrto nuo de 8 4 9 9 remanet
tcio hoi 7 1 6 f qrto 7 6 1 f Cr ut ham ptiu eq. mlca 7 q
ff ff 4 p 4 q ff ff 8 et hoc tm totu p 7 que ff ff 11
que p 17 q ff ff 19 er 1 7 6 4 que tplica sic alios nuos tplicastis
err f 0 9 4 que e suma pdi residu. qbz exteris de 8 4 9 9 remanet
p ptio eq f 4 0 f ut p alia regla ueim. Cr nota q p hac re
gula oms ullas potit solue qones i qb un petit ab ob alijs f suos bz
pte alia. ut partes erhiberi. ¶ Cr si pm peteri reliqt $\frac{1}{f}$ $\frac{1}{7}$ .s. $\frac{7}{17}$ er qrto $\frac{1}{7}$ $\frac{1}{6}$.s. $\frac{17}{f 7}$
er ff $\frac{1}{4}$ $\frac{1}{f}$ .s. $\frac{9}{70}$ er tci $\frac{1}{6}$ $\frac{1}{4}$ .s. $\frac{11}{70}$ Jnueies ordie sto pmu hre
1 7 7 6 fm 4 f 7 7 2 tciu 7 6 0 7 7 qrtu 8 7 9 0 7 et ptiu eq
ee 1 7 8 6 4 7 | Q nobis ppta apticio magu nuico con
te qnq hoies byos hntes. naue eme uoluer. | stantinopolitano i constantinopoli
quoy pm petit $\frac{1}{4}$ $\frac{7}{7}$ reliqt. nij. npoy byzoy. sedt petit $\frac{1}{f 8 0}$ $\frac{1}{6}$ $\frac{7}{7}$
tci petit reliqt $\frac{1}{6 7 8}$ $\frac{1}{6}$ $\frac{7}{7}$ qrto petit $\frac{1}{f 7 0}$ $\frac{1}{7}$ $\frac{7}{7}$ Q i nto petit re
liqt $\frac{1}{8 1 0}$ $\frac{1}{7 7}$ $\frac{1}{10}$ $\frac{7}{7}$ Q ua qone rta ad sua regula reducre studuim
Q i a pm petijt $\frac{1}{4}$ $\frac{7}{7}$ tpus dual ugulas i una ugla reduri. sic
qd uidi de $\frac{1}{4}$ $\frac{7}{7}$ i quo nuo reperiet uideb 1 4 7 accepi de $\frac{7}{7}$
de 14 que fr 10 er $\frac{1}{4}$ de 1 4 qe 7 unum illim 7 fuerit
$\frac{17}{14}$ Jte eadem roe de $\frac{1}{f 8 0}$ $\frac{1}{6}$ $\frac{7}{7}$ que petijt sedt fecj alia uia
gula qe $\frac{f 0 1}{f 8 0}$ Jtm de $\frac{1}{6 7 8}$ $\frac{1}{6}$ $\frac{7}{7}$ fecj alia ugla. s. $\frac{7 9 9}{9 4 7}$ et uic

positio prima

326/404	341/420	799/947	401/480	13/14

Secunda

326/79	341/79	799/158	401/79	13/2

1/420 1/7 2/3 [illegible] petitionem redigi in unam uirgulam. s. in 341/420 Adhuc
redigi [illegible] hominis s. 1/810 1/27 1/10 2/3 in aliam uirgulam s. in
326/404 et posui per ordinem 326/404 341/420 799/947 401/480 13/14 et habuimus eos per
prima positione. Deinde extraxi 13 de 14 remanserunt 2 sicut que posui 13
cum uirgula sic 13/2 [illegible] sicut uirgulam ponendum. Item extraxi 401
de 480 remanent 79 sicut que posui 401 cum uirgula sic 401/79 Item ex-
traxi 799 de 947 remanserunt 148 sicut que posuimus 799 cum uir-
gula 799/148 [illegible] 341 de 420 remanserunt 79 sicut que
posuimus 341 sic 341/79 Adhuc extraxi 326 de 404 remanserunt
79 sicut que posuimus 326 sic 326/79 Postea posui ex parte sicut prima
positione 326/79 341/79 799/148 401/79 13/2 Et habui eas per secunda positione ut hic osten-
dimus [illegible] 148 in quibus reperimus omnes rupti secunde positionis et multiplicaui
ipsa per 148 per 13 prime positionis et diuisi per 2 que sunt sub prima uirgula
secunde positionis exierunt 1184 Adhuc multiplicaui 148 per 480 per [illegible] et diui-
si per 79 hoc est duplicaui 480 et habui 960 Item multiplicaui prescripta 148
per 947 prime et diuisi per 148 exierunt in 947 [illegible] multiplicaui eadem
148 per 420 et diuisi per 79 que sunt sub 341 exierunt 840 Et
adhuc multiplicaui 148 per 404 prime positionis et diuisi per 79 que sunt sub
326 [illegible] exierunt 810 cum quibus [illegible] 1184 et 960 et 947
et 840 [illegible] fuerunt 4742 que cum debui habere per summa cunctorum bis.
illorum quinque hominum. et multiplicare 148 per numerum hominum uno in extremo s. per
4 [illegible] multiplicaui 148 per 4 sed seruaui ea pro residuo quod remanet
semper iiii hominibus. Post emptionem nauis ideo quod bis. 4742 integraliter per prescrip-
ta 4 diuidi possit. Unde diuisi 4742 per 4 exierunt bis 1188
quos habuimus per summa illorum quinque hominum. ex quibus extraxi seruatum residuum s. 148 re-
manserunt pro pretio nauis bis. 1030 deinde ut habeam bis. primi hominis. accepi 13/2
de 148 hoc est quod multiplicaui 148 per 13 et diuisi per 2 exierunt 1027
que extraxi de pretio nauis s. de 1030 remanserunt bis. 3 et tot habuit
primus. deinde ut habeam bis. secundi multiplicaui 148 per 401 que sunt sub 79 et diui-
si per [illegible] 79 et hoc est quod accepi 401/79 de 148 que sunt 802 que extraxi de
1030 remanserunt bis. 228 et tot habuit secundus. Item ut habeam bis
tertii hominis accepi 799/148 de 148 uidelicet de prescripto residuo. fuerunt
[illegible] 799 que extraxi de 1030 remanserunt bis. 231 et tot habuit tertius
Iterum accepi 341/79 de 148 sic quod diuisi 148 per 79 exierunt
2 que multiplicaui per 341 et habui 682 que extraxi de 1030 predictis rema-
serunt 348 et tot habuit quartus. Similiter accepi 326/79 s. quintam uirgulam
secunde positionis de 148 [illegible] 642 que extraxi de 1030 re-
manserunt 378 [illegible] Modus aliis de quinque hominibus in emptione unius
[illegible] reliquis [illegible] 1/2 suorum bisorum. Et

Nauis
1030

primus
3
Secundus
228
tertius
231
quartus
348
Quintus
378

sedis u 7 tercius petunt reliquis 1/3 tercius 7 quartus petunt reliquis 1/4 quartus 7 quintus
petunt reliquis 1/5 quintus 7 primus petunt reliquis 1/6 7 sic proponit ipsum equum e
mere. Quamvis duo illorum in simul petant. tamen non dissimulatur hec questio a fratribus
in quibus unus petit omnibus reliquis. quare ponet in ordine petitiones ipsorum sic in margine
circuitus. 7 vocabis ipsas primam positionem. ubi qua describes secundam positionem. 7 mulcta
bis singulariter 60 in quibus reperiuntur rupta secunde positionis per numeros qui sub singulis
sunt prime. s. per 2 et per 3 et per 4 et per 5 et per 6 et divides primam
mulcationem per 1 secunde positionis secundam per 2 tertiam per 3 quartam per 4 quintam
per 5 ut supra fecimus in questione iiii hominum et terrarum 7 hebreorum 120 et 90
et 80 et 75 et 72 quibus omnibus insimul iunctis faciunt 437 quibus unus
quisque ipsorum computatur est. cum duo illorum semper per ordinem petunt reliquis. quare cum 437
integraliter non dividatur per 3 triplicabis residuum quod remanet tribus illorum per or
dinem post dationem quam dant suis petitoribus quod residuum est 60 quibus triplicatis fa
ciunt 180 que sunt residuum quod remanet tribus illorum per ordinem post expositionem equi cum sum
ma quinque hominum fuit 437 quod extracto residuo secundo a summa s. 180
de 437 remanent pro pretio equi bis 257 et quartus 7 quintus 7 quintus dant suis
petitoribus s. primo 7 secundo quantum eis remaneo s. extrahes 180 de pretio equi rema
nebit 77 et tot bis habet inter primum 7 secundum hominem. Item quia quartus 7 quintus 7 primus
dant secundo 7 tercio medietatem dicti residui ab ipsa positione circuitus extrahes dimi
dium residui s. 90 de pretio equi remanebit pro bis secundi 167 [illegible]
tercia 1/3 et 1/4 et 1/5 eorum residui s. 60 et 45 et 36 de pretio equi remanebit
tertius et quartus 197 et pro bis quarti 7 quinti 212 et pro bis quinti 221 [illegible]
perent bis unicuique ad invicem. ergo de 77 primi 7 secundi [illegible] 221 197
quinti 7 primi erunt 495 in quibus 495 primus bis computatur [illegible] enim summa
quinque hominum 437 quod differentia que est 437 usque in 495 s. 58. [illegible]
58 extrahens de bis primi 7 secundi hominis s. de 77 remanebit [illegible] 19
quibus extractis de bis secundi 7 tercii s. de 167 remanent 148 pro bis tercii hominis [illegible]
de bis tercii 7 quarti hominis s. de 197 remanent 49 quarto homini [illegible]
ti 7 quinti hominis s. de 212 remanebunt quinto homini 163 quibus [illegible] 58 pri
mi hominis inventis reddunt 221 ut pro bis quinti et primi inveniatur. [illegible] quia so
lubilis est. possemus enim ponere in similibus questionibus ut [illegible] quam duo petunt reliquis [illegible]
petitiones quas solveres ordine secundo. et scias quasi homines fuerunt pares [illegible]
res per ordinem petunt reliquis. erunt questiones eorum quasi solubiles. [illegible]
ponamus unam questionem insolubilem et aliam solubilem [illegible]
lius nominam cognoscendi solubiles ab insolubilibus. Questio insolubilis

Sunt quatuor homines quorum primus 7 secundus petunt reliquis 1/2 [illegible] 1/3
Tercius 7 quartus 1/4 quintus 7 primus petunt reliquis 1/5 Inveniens per primam
et secundam positionem quod summa eorum est 77 7 residuum quod remanet duobus illorum per or
dinem est 24 quibus extractis de 77 remanent 49 pro pretio equi quod tercius et quartus

positio prima				
1/6	1/5	1/4	1/3	1/2
Secunda				
1/5	1/4	1/3	1/2	1

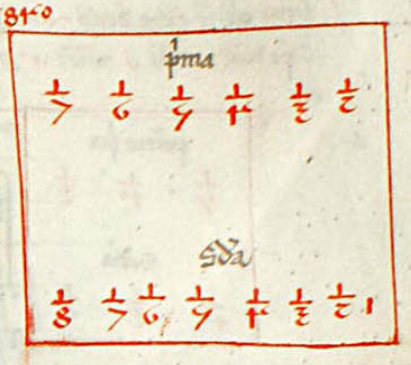
Equus
257

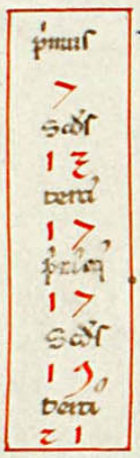
180

primus
58
Secundus
19
tercius
148
Quartus
49
Quintus
163

aunt ꝑmo ⁊ scdo cm ꝗrum eis remanet· s· ⁊ cū qbꝫ ⁊ ꝑmus ⁊ scds hūt.
⁊ g ꝑmus et secundus hūt· ⁊ ꝫ silr q ꝑmus ⁊ ꝗrtus dunt tno et scdo di
midiū residuū· s· ⁊ ccūle ⁊ de ⁊ remanent ⁊ ꝑ b scdi ⁊ tert. Item ccūle· s
·s· ½ de ⁊ de ⁊ remanent ⁊ ꝑ b cm ⁊ qm q ē ipossibile· ē enī sūma eoꝝ· ⁊ ꝫ
et qbꝫ ꝑmus ⁊ scds hūt ⁊ ꝫ qre tnus et ꝗrtus deberent hre ⁊ s· residuū q ea
⁊ ust in ⁊ vl'alr q ꝑmus ⁊ scds petunt tno ⁊ ꝗrto· ½ ⁊ tnus ⁊ ꝗrtus petūt
ꝑmo ⁊ scdo· ½ ꝫ mo mutemus q partes ō ꝑtium eq· et sūma hominū· uij·
qs mutemus mutemus bīs ꝑmi ⁊ scdi ⁊ tertij ⁊ ꝗrti tanq ē et bīs duox hominū
q demonstrauimus in regula duox hominū· s· pone q ꝑmus et secundus sit
unus ho· ⁊ tūs ⁊ ꝗrtus sint alius ⁊ tūe petat ꝑmus scdo ½ ⁊ scds ꝑmo· ½
qr ꝑmus· s· mr ꝑmi ⁊ scdin hūt· ⁊ scds· s· mr tertij ⁊ ꝗrtij 6 et ꝑtium eq
ē ⁊ ho q addico dmidio de 6 sr ⁊ uel ½ de 6 sr 6 fiunt ⁊ q ⁊ de ⁊ de
6 insimul mutemus· sūt 7/10 g ꝑtū eq ē· 7/10 de sūma illox· uij· dm videas q ꝑ
tes sint pretij eq et cadē sūma scdin pmōnes qs petunt scds ⁊ tnus ꝗrto ⁊
ꝑmo· ⁊ ꝗrtus ⁊ ꝑmus scdo ⁊ tno· sīlr scds ⁊ tij petunt ꝗrto ⁊ ꝑmo ½ ⁊ ꝗrtus
⁊ ꝑmus petunt scdo ⁊ tno· ¼ Vñ ꝑ regulā duox hominū· ꝑdcām mutemus·
scdm ⁊ tnū hre ⁊ ꝗrtū ⁊ ꝑmū 6 ꝑtū eq ⁊ q ꝑtū· s· ⁊ de ⁊ de ⁊· s· de 11
sūt 7/11 g ꝑtū eq de sūma· uij· hominū ē· 7/11 Jnuenimꝰ enī ꝑmū uꝫ ptū ee
7/10 de cadē sūma q ē iquemens· insolubilis ē g qo ista qre ponam aliam qo
nē solubilis· in q ꝑmus ⁊ scds petunt reliqs· ½ scds ⁊ tnus 7/7 tnus ⁊ ꝗrtus
7/11 ꝗrtus ⁊ ꝑmus petūt reliqs 7/7 hāc enī qonē· qlitūcq ꝑ istos duos modos ꝯ
sidabis· mutemus eā solubilē ee· Vñ si ꝓcessimus scdm q docui ē dm hīs duox
illox ꝓ ordinē habuerimus· mutemus q ꝑmus ⁊ scds hūt· 11 mr scdm ⁊ tnū·
17 inter tnum ⁊ ꝗrtum 16 mr ꝗrtū ⁊ ꝑmū· 14 et ꝑtium eq ē 13 flam
ī sepatōne unī ab alterō ml aliud dicendū n q de hīs 11 qs hūt mr ꝑmū
⁊ scdm· hēat ꝑmus ho ꝗrtū uls ut dicamus 4 ꝗre scds hr. 6 tertij 7 cū
hēat cū scdo· 17 et ꝗrtus 9 cū hēat 16 cum tno qbꝫ 9 additus eī 4 pa
uni hoīs facium 14 ut ꝓsumma ꝗrti ⁊ ꝑmi hoīs reptra erūt Ho solubilis cū
Si hoīes ee 7 ⁊ ꝑmus ⁊ scds ⁊ tij quint reliqs ½ scds hoīes sint 7·
Quinto ⁊ tij ⁊ ꝗrti petunt reliqs ½ tij ⁊ ꝗrtus ⁊ quintus petunt ½ ꝗrtus
et quin ⁊ sextus· ¼ quī sext septimi· ⅙ sext septimi ꝑmus ⅐ septimus ꝑmi
⁊ scds reliqs· uiij· ⅛ bīoꝝ suoꝝ ⁊ ꝓponat emere ipm equm· pona pōnōne ꝑma
sub scda rune 170 in qbꝫ mutemus ruptos scds pōnōis ml'p ⁊ ꝑme ⁊ dmide
p ⁊ scde et 180 Item ml' 7 p ⁊ ꝑme pōnōis ⁊ dmide p ⁊ scde hoc ē ½
de 170 ml p ⁊ et 690 Silr tna de 170 ml p ⁊ ꝗrta p 4 ⁊ quta p 6 ⁊ ser
tam p 7 ⁊ septima p 8 et 1460 et 1470 et 1404 et 1409 qbꝫ 1480 mutemus
690 et cū 840 et hr in sūma bīoꝝ ipoꝝ 1070 et q scp pent quotiēs ipoꝝ
bīoꝝ qre ꝓportat in dca sūma· Vñ ml' 170 p ⁊ et 690 p residuo illox
uij· qbꝫ et de 1070 remanū p ꝑmo eq bīs ⁊ dm dmide 1680 p ⁊

me pōtōnis ⁊ ecclie de 1 ℔ 9 rēanēt p̄mo ⁊ scdo ⁊ tcio 669 Item ecclie de 840
1 ℔ 9 mediet̄ ⁊ tcia ⁊ q̄rta ⁊ qnta ⁊ sexta ⁊ septima de 1680 et ℔ 60
et ℔ 10 et 1 ℔ 6 et 1 30 et 1 ℔ 0 rēmebūt scdo ⁊ tcio ⁊ q̄rto bz̄
1409 tcio q̄rto ⁊ qnto 1789 Q̄rto qnto sexto 1919 Qnto sexto septimo.
1017 Sexto septimo p̄mo 1069 Septimo p̄mo scdo 1 109 deīn ut sepet
ab mulier iunge bz̄ scdi tcii ⁊ q̄rti cū bz̄ qnti sexti septimi 1409 cū 1017
et ℔ 47 1 quos ecclie de sūma illor oīm ℔ de ℔ 07 9 rēanēt p̄mo hōi bz̄
407 Hē addit bz̄ tcii q̄rti ⁊ qnti cū bz̄ sexti septimi p̄mi ⁊ ecclie sūmam e
ou de ℔ 07 9 remanēt scdo hōi bz̄ 171 qb; uxores cum 407 p̄mi red
dūt p bz̄ p̄mi ⁊ scdi 678 q̄ ℔ 9 plus de bz̄ p̄mi ⁊ scdi ⁊ tcii · q̄r tcius hō hr
debitū ipōs 9 vl'b qō ē m solubilis sit nag; solubil cū debito tcii hōis · de
ūm ut leam' b' q̄m ecclie debitum tcii · ℔ · 9 de b' scdi · ℔ de 171 remanēt 167
remanſ —— g; scdus ⁊ tcius hūnt 167 qb; ecclius de b' scdi ⁊ tcii ⁊ q̄rti · ℔ ·
de 1409 remanēt q̄rto 1 ℔ 7 de qb; ecclie 9 undecim debitū tcii hē
hr ut tcium ⁊ q̄rtū 1 ℔ 8 qb; ut' ū b' tcii ⁊ q̄rti ⁊ qnti · ℔ · in 1789 ℔
℔ 41 et tot hr qntus ⁊ undecim ō b' q̄rti ⁊ ecclie 9 de b' q̄rti ⁊ qnti ⁊ sexti
ti · ℔ · de 1919 remanēt sexto hōi 1 ℔ 1 ℔ ecia ⁊ b' qnti ecclius de 1017
qnti sexti ⁊ septimi hēbūt septim' 1 ℔ 21 Sme debito ē aūē illor solut' ordi
ne modi sup̄scpti cū p̄mi tres petant retrogr̄ tcium scdi 1/2 tcii 1/3 alii 1/4
alii 1/5 alii 1/8 alii 1/9 hr ē p̄mus 1077 scdus 717 tcius ℔ 89 q̄rtus
1677 qntus 997 Sextus 647 Septimus 1 ℔ 9 et eq̄ ualet 1 ℔ 96
Item duo hōies bz̄ hūntes q duos eqs emē De duob; hōib; et d' duob' eqs
ualebant · quor scdus ualebat bz̄ ⁊ magr p̄mo uī p̄mus sic loqr̄ scdo Si
dares mi tcium tuor bzōor p̄mū equm emēm · Cui alter redit ⁊ tu si dares
mi 1/2 tuor bzōor scdm equm emēm · ℔ · carioren · q̄r q̄ritas bzōor illor ū ū
et p̄mū unusquisq; eq · b' emī qō p̄ sup̄scptā unī eq regtam solut' undecim ū
p̄mas p̄mū pecunias ipōr in ordinem sic 1/2 1/3 q uocant de descriptōne p̄ma
ut sup̄ dixim' deīn ecclie 1 q ē sup ⁊ de ipis ⁊ remanū ⁊ sic quem pone ut
gulam ⁊ et sic 1/2 tot ē q scdus lō dat p̄mo dumodū de hoc q ei remanet ⁊ sil'
faties de 1/4 ei hēbis · 1/2 qz p̄mus dat scdo de b' q ei remanet Q̄te desiderat
1/2 1/3 · ℔ · scdam pōtōnē sub p̄ma ut h' ostendā deīn regulas duos mōos quo
rū scdus sit ⁊ unusquor p̄mo ficta p̄mus equs ualet 1 unus scdo Et p̄mus
mūs illor dumdat integrē p · ⁊ scde pōtōnis Et alt dumdat p ⁊ eid
pōtōnis Sunt q mūi illi 8 et 6 et ei 8 residuū q remanet scdo hōi
p q dederat p̄mo ficta p̄mi sūor bzantior et 6 ei residuū p̄mi hōis q̄re
multiplica 8 pdca p ⁊ p̄me pōtōnis ⁊ dnde p ⁊ scde ecclius bz̄ ·
12 et tot hūnt scdus Hē multiplica residuū p̄mi hominis · ℔ · 6 p 4 p̄me pō
tōnis ⁊ dnde p ⁊ scde ecclius bz̄ 8 et tot hūnt p̄mus Sicut ut hēas pa
ū equor ad de bz̄ illor · ℔ · 8 cū 12 et 20 de qb; ecclie residuū scdi hōis ut





primi equi. Et extra de eisdem 20 residuum primi hominis videlicet 6 remanent 14 proportio

positio prima		
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{3}$
secunda		
$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$

primus	7
secundus	13
tertius	17
primus equus	17
secundus	19
tertius	21

habet 8 remanent 12 pro pretio secundi equi.

De tribus hominibus et totidem equis

Tres homines sunt 3 et equi sunt similiter 3 et secundus equus valeat bis 2 magis primo. Et tertius valeat bis 2 magis secundo. Et primus homo petat reliquis duobus $\frac{1}{3}$ suorum bizantiorum et proponat emere primum equum. Secundus itaque petat $\frac{1}{4}$ et secundum equum emere proponat. Tertius vero petat reliquis $\frac{1}{4}$ et tertium equum emere proponat. Dicimus $\frac{1}{4}$ $\frac{1}{3}$ pro prima positione et $\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$ pro secunda. Ostenditur tunc reperies tres numeros quorum secundus sit 2 minor primo et tertius sit 2 minor secundo propter differentiam priorum equorum. Et maior ipsorum cum possibile sit dividatur in equales 2 prime positionis. Secundus vero per 3 numeros itaque 20 et 18 et 16 quorum primus s. 20 erit residuum secundi et tertii. Secundus vero per ~~minor~~ vero per s. 18 erit residuum tertii et primi. Minor itaque s. 16 erit residuum quod remanet primo secundo homini. Deinde multiplica residuum secundi et tertii hominis s. 20 per 3 prime positionis et divide per 2 secunde exibunt 30 et tot habuerunt inter secundum et tertium hominem. Item multiplica residuum tertii et primi hominis s. 18 per 4 prime positionis et divide per 3 secunde exibunt bis 24 et tot habuerunt inter tertium et primum hominem. Rursus multiplica 16 que sunt residuum secundi et primi hominis per 4 prime positionis et divide per ~~secunde~~ 4 secunde exibunt bis 20 et tot habuerunt inter secundum et primum hominem. Quibus additis cum bis 24 quos habent inter tertium et primum hominem. Et cum bizantiis 30 quos inter tertium et secundum habuerunt erunt bizantiis 74 in quibus cum unusquisque ipsorum bis computatus sit. Ergo dimidium ipsorum s. 37 erit summa bizantiorum illorum trium hominum. Ex quibus extractis bizantiis 30 quos habent inter secundum et tertium hominem remanent primo homini bis 7 similiter extractis 37 bis 24 quos habent inter tertium et primum hominem remanent secundo bis 13 Rursus extractis bizantiis 20 quos habent inter secundum et primum hominem ex illis bis 37 remanebunt tertio homini bis 17 Postea adde cum bis 7 primi hominis tertia bizantiorum reliquorum duorum hominum videlicet 30 habebis pro pretio primi equi bis 17 Quare pretium secundi erit bis 19 hoc est bis 2 magis pretio primi. Et pretium tertii erit bis 21

De quatuor hominibus et totidem equis cum unusquisque petat reliquis

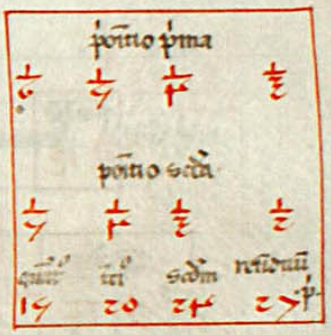
Tres homines sunt 4 et equi similiter sunt 4 et secundus valeat bis 3 magis primo. Tertius valeat bis 4 magis secundo. Quartus itaque valeat bis 5 magis tertio. Unde primus homo petat reliquis tribus tertiam bizantiorum ipsorum et proponat primum equum emere. Secundus itaque petat $\frac{1}{4}$ reliquis et proponat secundum equum emere. Tertius quoque petat $\frac{1}{5}$ et proponat emere tertium equum. Quartus itaque petat $\frac{1}{6}$ reliquis et proponat quartum equum emere. Et ut que de equis dicta sunt melius in [illegible] singularis positionis demonstrate. Quia primus habita $\frac{1}{3}$ bizantiorum reliquorum tantum habet pretium tantum primi equi cum residuo illorum trium [illegible] bizantiorum illorum iiij hominum quod residuum [illegible] cum secundus petat $\frac{1}{4}$ reliquis habet tertium tantum secundi equi [illegible] equi cum residuo reliquorum trium s. tertii et quarti et primi hominis est eadem quantitas bizantiorum illorum [illegible] residuum notabis secundum. Et quia secundus equus valet [illegible] 3 [illegible] est minus bis 3 primi residui. Ideo quia tertius [illegible] petat $\frac{1}{5}$ [illegible] pretium tertii equi ergo pretium tertii equi est residuo

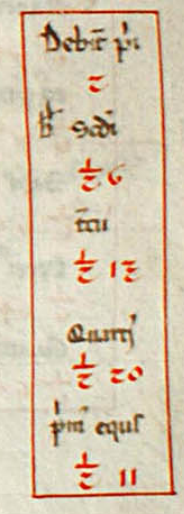
109

[illegible]

positio prima			
1/6	1/4	1/3	1/2
positio secunda			
1/4	1/3	1/2	1/2
quartus	tertius	secundus	residuum
14	20	24	27 p.

Debitum primi	2
Debitum secundi	1/2 6
tertii	1/2 12
Quarti	1/2 20
primi equus	1/2 11





Sedi	
½	14
Tertii	
½	18
Quarti	
½	22

Qrti	Tcii	Sedi.	residuū p̄mi
74	80	84	87

p̄mi hō	
½	12

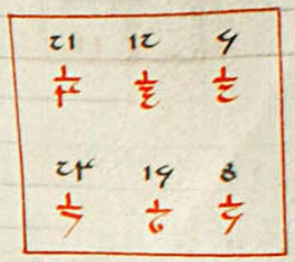
Sedi	
½	22
Tertii	
⅙	14
Quarti	
⅙	74
eq p̄mi	
⅙	87
Sedi	
⅙	60
Tertii	
⅙	64
Quarti	
⅙	69

sedi hoīs unde 74 de stis bis ½ 78 remanet tcio hoi bis. ½ 12 Rursus
ertiens bizanthys p̄mi 7 fi 7 tcij ho hoīs unde 18 et eisdē bizāthys
½ 28 remanet qrto hoi byzanthy ½ 20 Demū ut p̄tū p̄mi eq
addiscas. accipe tcia et bizāthys fi 7 tcij 7 qrti hoīs unde de ½ 40.
qa p̄mus ho pertens. ert bis ½ 12 de qb ertuhe debitū p̄mi hoīs
unde de 2 remanebit bizāthy ½ 11 p p̄tio p̄mi eq. Qr p̄tū fi eq
erit bis ½ 14 hoc ē bis 7 mag p̄tio p̄mi. tcij ū bis ½ 18 Qr
ti quoq bis ½ 22 .s. 4 mag p̄tio tcij equi ut p̄ponit ē. Qa si hāc
eādē qonē sūl debito p̄mi hoīs soluē uoluīs. p p̄ceptis. uij. equalib re
siduis. pce alios. uij. inuenies nūos q sit i eorde diffim. Sicut p̄mus illoz
87 Sedi 84 Tertius 80 Qrtus 74 Deinde sīlis demōstrationis mlea
p̄mū residuū unde 87 p 7 p̄me positōis 7 diuide p 2 sede. ex
buit bis ½ 120 p qntitate bizāoz fi 7 tcij 7 qrti hoīs. Sce mlea fm re
siduū unde 84 p 4 pe positōis 7 diuide p 2 se eribuit bis 112
p qntitate bizāoz tcij 7 qrti 7 p̄mi hoīs. Rursus mlea tcii residuū unde
80 p 4 p̄me positōis 7 diuide p 4 se. eribē p qntitate qrti 7 p̄mi
7 fi hoīs. Adhuc 74 .s. qrtū residuū mlea p 6 p̄me positōis 7 diuide
p 4 se eribē bis 90 q se quattuor bizāoz p̄mi 7 fi 7 tcij hoīs. Quib ad
ditis cū bis 100 7 cū 112 7 cū ½ 120 m uenies. erunt bis ½ 22
Quib cū sit triplū summe bizāoz illoz diuides eos p 2 eribuit bis ⅙ 144
qui se summa bizāoz illoz. uij. hoīnū. de qb ertuhe bizāos fi 7 tcij 7 qrti
hoīs .s. ½ 120 remanebit p̄o hoi bis ½ 12 Sce ertuhe bizāos tcij 7 qr
ti 7 p̄mi hoīs unde 112 de ⅙ 144 remanebit so hoi bis ⅙ 22 Rursus
bis 100 qs hīt int qrtū 7 p̄mū 7 fm hoīe. ertuhe de p̄ceptis bis.
⅙ 144 remanet tcio hoi bis ⅙ 144 Iterū ertētis bizāthys p̄mi 7 fi
7 tcij hoīs unde 90 de bis ⅙ 144 remanēs qrto hoi bis ⅙ 94
Et q demōstrandū ē sup̄i q int p̄tū p̄mi eq 7 p̄mū residuū ē qntitas
bizāoz illoz. uij. hoīnū. g si ertuerit ipm p̄mū residuū unde 87 de
eoz qntitate .s. de ⅙ 144 remanebit p p̄tio p̄mi eq. bizāthy ⅙ 57
Qr si ertuerit fm residuū unde 84 de ⅙ 144 remanebit sīl
bis ⅙ 60 p p̄tio fi eq. Sce ertēto tcio residuo unde 80 de eisdē ⅙ 144
remanebit bis ⅙ 64 p p̄tio tcij eq. Sīl ertēto qrto residuo .s. 84
de ⅙ 144 remanebit bis ⅙ 69 p p̄tio qrti equi. De quatuor hōibus
tantoz hoīes bizāos hītes et uno equo cum unusquisq; portat ī equalē tempus
unū equū emere uoluerūt. 7 cū nullus ipoz tm ī solidū emere posset. p mū
ipoz dixit. Si sedi ho darz mi dimidiū bonoz suoz bizāoz. 7 tcī darz
mi tcia. 7 qrtus darz mi qrtā sīl suoz. hūc equū emere posse. Et sedi respō
dit. Et si tcī ho darz mi tcia. 7 qrtus darz mi qrtā sic tu petis eis. 7 tu da
tes mi qrtā tuoz bizāoz. hūc equū sīl emem. tcī quoq petit qrto

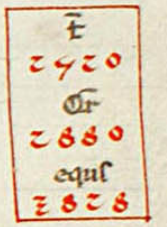
hoī q̄rtī suor bizōp. Ct ꝑo q̄ntī. Ct so seꝛtī. 7 ꝓpōit equū emẽ. Q̄ꝛtus nāq; petit ꝑo q̄ntī. Ct so seꝛtū. Ct tcio septimī. Ct ꝓpōit silr tpīm equū emẽ. Q̄ꝛit q̄ntus bizōp uñ cuiq; 7 ꝑtū equi. Describet petitōēl qual petit ꝑmꝰ hō so 7 tcio 7 q̄rto hoī ī ordinē sic $\frac{1}{p}$ $\frac{1}{2}$ $\frac{1}{2}$ sub quib⁹ ponet petitōnet ultī. s. q̄rti hoīs. s. $\frac{1}{7}$ $\frac{1}{6}$ $\frac{1}{4}$ vt ī hac margine ẽnit. Ct ertia hec 1 qđ ẽ sr̄ t de tpīs t remanebit 1 Q̄ mlca p 4 q̄ suñ sb ꝑma uirgula ifiouſ linee erūt 4 que põe sr̄ $\frac{1}{2}$ Ct eḡ ertrahe 1 qđ ẽ sr̄ 4 de tpīs 4 rēanebō p que mlca p t que sr̄ sb ꝑa uirgla supio ris linee erūt 8 que põe sr̄ $\frac{1}{4}$ Jtē ertrahe 1 qđ ẽ sr̄ t de tpīs t rēanebō t que mlca p 6 que sr̄ sub ſa ūgla ifiouſ linee erō 12 que sr̄ sb ſa uirgla ifiouſ linee erō 12 que põe sr̄ $\frac{1}{2}$ silr ertrahe 1 qđ ẽ sr̄ 6 de tpīs 6 rēanēt 4 q̄ mlca p t erūt 14 que põe sr̄ $\frac{1}{6}$ Q̄ nūſ ita reptis. mlcabis p 12 que p t 1 que sr̄ ꝑmā linea erō 12 60 7 tot hūit ꝑmꝰ hō. Jt mlcabis 8 q̄ sr̄ sr̄ $\frac{1}{4}$ de ſa linea p 12 que p t 1 de supiori linea erō 2 0 1 6 et tot hūit scōs. Jtē mlcabis 8 q̄ sr̄ sr̄ $\frac{1}{4}$ p 14 q̄ sr̄ sr̄ 6 que p t 1 que sr̄ sr̄ $\frac{1}{4}$ erō 2 4 2 0 7 tot hūit tcī. t ultꝰ mlca supscepta 8 p 14 que p t 4 que sr̄ sr̄ $\frac{1}{7}$ erūt 2 8 8 0 7 tot hūit q̄rt. Sz ut hec bizōs uñ cuiq; ī miōi suma. diuide uñquēq; iuētor nūoꝝ p ꝛc cū integrū fieri possit eribē p bizāthys ꝑmi hoīs 104 et p bizāthys sī 168 7 p bizāthys sī tcij 210 7 p q̄rti 240 deīn ut hal ꝑtū equi. accipe de bizāthys 168. s. 84 7 tcīa de. 210. s. 70 7 q̄rtā de 240. s. 60 q. sr̄ petitōēl ꝑmi hoīs. et addes eos cū bizanthys 104 ipī. 7 hebis p ꝑtio equi bizōs 219 7 sic poteris de plib⁹ hoīb⁹ opari. Jncipit pars vi. d uiagiou ꝓpōitōb⁹ q̄que simul eou

Quidam ꝓgens negotiando lucā. feō ibi duplū. 7 expendit in. dr̄. 12 Q̄ egrediens in. ꝑcepit florētiā. fecit ibi duplū. 7 expendit. dr̄. Cū rediꝛ pisas. 7 ibi faceret duplū 7 expenderꝛ dr̄ios 12 nil ei ꝓpōit remānisse. Q̄ritꝰ quot ipe ī ꝑncipio hūit. Q̄a ꝓponit ipe sēp duplū fecisse. manifestū ẽ q. de uno faciebat t Vñ uidend ẽ de 1 q̄ pars sit de t .s. $\frac{1}{2}$ q. describat t̄ ꝓ tres uiagios q̄s ipe fecerat sic $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ et mul cet t p t 7 p alia t que sr̄ sub uirgul erūt 8 de q̄b⁹ accipe $\frac{1}{2}$ .s. 4 de q̄b⁹ accipe $\frac{1}{2}$ .s. t 7 de tpīs t accipe $\frac{1}{2}$ .s. 1 Post hec adde 4 cū t 7 ē 1 erūt 7 q̄ mlca p 12 dr̄. q̄s ipe expendebat. erūt 84 que diuide p 8 eribūt dr̄ij $\frac{1}{2}$ 10 7 tot hūit hō ille. Vbi ter fecit duplū de dr̄ijs $\frac{1}{2}$ 10 fuerūt 21 de q̄b⁹ expendit 12 remanserūt 9 quib⁹ duplicatis faciūt 18 de q̄b⁹ expendit 12 remāserūt 6 quib⁹ itēm duplicatis faciūt 12 de q̄b⁹ ertracto expendio. s. 12 nil ei ut ꝓpositū ẽ remānisse ꝓpīt. 7 sic de. uij. ꝑ plib⁹ uiagiꝰ poteris opari.

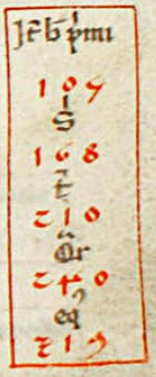
Jtē ꝓpōit q. ī ultio ꝑceptor uiagior p̄ expendiū ei dr̄ij quibꝫ remānisset



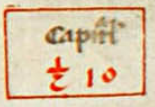
Nūs ertrahe 1 q. ē sr̄ t d ipis t remanet 2 q̄ mlca p — et 21 q̄ põe sr̄ t ertrahe 1 q. ē sr̄ 7 d ipis — remanet 6 q̄ multa p t eīt 24 q̄ pone sr̄ 1/7



dimidiū



12 7



Capitule
7/8 11

De eodem

De eodem

De eodem in quatuor magis

De eodem

De eodem

De eodem

De eodem

Capitale

expeditū

fuerit drios 81 g de 1 drio tpe luerut 30 q̄ dicel p 1 dño q̄ pono
i tpi capitale luerut drios 80 q̄d ponā ut tm luerit drios 20 mlt
abis magn 1 p 20 7 diuide p 30 eribit $\frac{1}{1^{\mathrm{p}}}$ unū dri. qua addta cū
drijs ⅁ erit dri $\frac{1}{1^{\mathrm{p}}}$ ⅁ 7 tm̄ cēt illi capitale. Jē capitale ei fuit $\frac{1}{1^{\mathrm{p}}}$ ⅁ et
ignorēt expendiū 7 i fine luerut ē 20 dcēā quidē hāc solutōnē inue-
re p regulā dictā. pōe p ignoto expendio rē 7 tpli $\frac{1}{1^{\mathrm{p}}}$ ⅁ erit $\frac{2}{1^{\mathrm{p}}}$ 27 de
q̄b tolle rē p expēdio p̄mi magi rēmēt $\frac{2}{1^{\mathrm{p}}}$ 27 minū re q̄b tm tpliatus
fuerat $\frac{1}{1^{\mathrm{p}}}$ 87 tb reb diminutis. de quib tolle expendiū sm. s. rē rēi
nēt $\frac{1}{1^{\mathrm{p}}}$ 87 minū. nūs. reb. quib tpliatus erit $\frac{2}{1^{\mathrm{p}}}$ 27 ⅁ minū 17 reb. de quib
cētū re 1 p. s. expendiū tciū rēmanebt $\frac{2}{1^{\mathrm{p}}}$ 27 ⅁ minū 17 reb quib ultio
tpliatus fuerat $\frac{1}{1^{\mathrm{p}}}$ 7 1 ⅁ minū reb 2 ⅁ reb a quib diminuta re. rēmanebt
$\frac{1}{1^{\mathrm{p}}}$ 7 1 ⅁ diminutis. vl. reb q̄ equāt drijs $\frac{1}{1^{\mathrm{p}}}$ ⅁ et 20 . s. capitali 7 luer.
p estimū g 1 0 rel rēmanebt $\frac{1}{1^{\mathrm{p}}}$ 7 1 ⅁ que equāt 1 0 reb 7 drijs. tolle g
drios $\frac{1}{1^{\mathrm{p}}}$ 2 ⅁ de $\frac{1}{1^{\mathrm{p}}}$ 7 1 ⅁ rēmēt dri 7 2 0 q̄ equāt 1 0 reb. q̄ dim
de 7 2 0 p 1 0 eribit 18 p q̄lito expendio. ℣ qđ si repit p regl
ita fac. pone tm rē p expendio qua addta cū capitali 7 luc ei. erit rel 7
dri $\frac{1}{1^{\mathrm{p}}}$ 2 ⅁ q̄ huit ho ille i q̄rto magio ex triplo drior q̄ remaserit illi
p expendiū tcij magi. q̄ acē. $\frac{1}{2}$ cor. uelut tcie rei 7 dri $\frac{2}{1^{\mathrm{p}}}$ ⅁ cū q̄b ad
de expendiū tcij magi. s. rē. erit. 1 nūs. tcie rei et dri. $\frac{2}{1^{\mathrm{p}}}$ ⅁ q̄ huit i tcio magio
ex tplo drior qui remaserit ei p expēdiū fi magi. q̄ acē. tciā cor. s. $\frac{1}{2}$
rei 7 dri $\frac{1}{1^{\mathrm{p}}}$ 2 fit que adde rē. s. expendiū fedi magi. erit $\frac{1}{2}$ ⅁ rei 7 dri $\frac{1}{1^{\mathrm{p}}}$ 2
q̄ huit i fo magio ex tplo drior qui remaserit ei p expēdiū primi magi. q̄
acē. tciā cor erit $\frac{1}{2}$ 7 rei 7 dri 1 2 1 cū q̄b adde rē quā expendit i primo ma
gio erit $\frac{1}{2}$ 0 7 rei 7 dri 1 2 1 q̄ equāt triplo capitali ipi. s. drijs $\frac{1}{1^{\mathrm{p}}}$ 27 tolle
g. dri 1 2 1 ex drijs $\frac{2}{1^{\mathrm{p}}}$ 27 7 remanebit dri $\frac{2}{2}$ 26 qui equāt $\frac{1}{2}$ 0 7 q̄ ē lic
1 0 ad 27 ita $\frac{2}{2}$ 26 fit ad q̄litū expendiū. q̄ triplicabit g 27 p $\frac{2}{2}$ 26 erit
72 0 que diuidet p 1 0 ueiet 18 ut op. Quō alia d trib; magis
tem alia hoi ꝓponat qo. ut que dca sit meli intelligunt. uidel ex quadā q̄ fert
tri magia qui i po fec de duob trel. Jn fo. de. nūs. v. Et i tcio de 6 fert
7 7 expendebat drios 14 i uno quoq magio. q̄ i primo magio de du
ob fert trel. g ꝓportio capitali ipi ad capitale 7 luerū eide magi ē lic
2 ad 2 ad $\frac{1}{2}$. q̄r capitale ei fuit $\frac{2}{2}$ eide capitali 7 luc. q̄r pone $\frac{2}{2}$ ca deq̄ re
p. nūs. q̄nq pōe $\frac{5}{4}$ 7 p. vi. vij. pōe. $\frac{6}{4}$ 7 collecti eos lic. $\frac{6}{4}$ $\frac{5}{4}$ $\frac{2}{2}$
ex mlea nuos qui sit sb ugul i setpos. uidel 2 p 4 que p 7 erit
104 de quib ace $\frac{2}{2}$ que sit 70 de quib sume $\frac{5}{4}$ q̄ sit 46 de q̄b
sume $\frac{6}{4}$ q̄ sit 18 que adde cū 46 et cū 70 erit 174 q̄ tria. pos
sut ee eide 174 primū iuenire uidel ut mlcet 2 q̄ sit si 2 p 4 q̄p
7 que sit sb ugul erit 70 sic mlea eide 2 p 4 que sit si 4
que p 7 erit 46 et mlea eide 2 p eide 4 que p 6 que sit

117

sup 7 erũt ℔ 8 quib⁹ ĩsimł uẽtis. redeũt eidẽ 17℔ que mł̃ca ꝑ er
pendiũ uideł ꝑ 14 7 diuide ꝑ 10 4 eribũ 6/7 ℔ 7 tot ẽ ipi⁹ capitu
le.

De eodem

Ce si ꝓpoſuit q⁹ ſuũ capitale ſit. dr̃. 6/7 ℔ et q̃tũ q̃ntũ ſit expendiũ. ayl
ca 6/7 ℔ ꝑ 10 4 7 diuide ꝑ 17℔ eribũ dr̃ij 14 ꝑ ipi⁹ expendio
rel⁹ expẽdiũ ſit dr̃ij 14 7 ĩ fine ei dr̃ij 21 remãſiſſe De eodem
ꝓponit. Adde mł̃cationem de 21 in ℔ 8 ſupi⁹ ĩuenit que ẽ 1008
ſẽ ſũmã mł̃cationis de 14 ĩ 17℔ erũt 2618 que diuide ꝑ 10 4 eri
but 16/24 ℔ ꝑ ipi⁹ capitale.

Capitale
16/24 ℔

Dm ſi eiꝯ dicẽt⁹ q⁹ ſuũ capitale ſit 16/24 ℔ et ĩ fine ei remãſit. dr̃. 21
Ce quot ipſe expẽdebat q̃ntũ mł̃ca 16/24 ℔ ꝑ 10 4 erũt 2618 de q̃b⁹
ertrahe 1008 que ſurgũt ex mł̃cationẽ de 21 in ℔ 8 rem̃et 2610
que diuide ꝑ 17℔ eribũ dr̃ij 14 ꝑ ſuo expendio. De eodem

expẽdiũ
14

Cerũ ſi diꝯit q⁹ in fine triũ uiagior ſuũ ei remãſerit capitale ertrahe
ĩuẽta ℔ 8 de 10 4 ſupi⁹ ĩuẽtis remẽt 47 in q̃b⁹ diuide mł̃cationẽ ex
pendij uideł de 14 ĩ 17℔ ſupi⁹ ĩuenit rẽmẽt 47 ĩ quib⁹ diuide

capitale
17/19 ℔ 4 7

mł̃cationẽ expendij. uideł de 14 ĩ 17℔ ſupi⁹ ĩuẽtis eribũ ꝑ ipi⁹ ca
pitale. dr̃ij 17/19 ℔ 4 7 De eodem

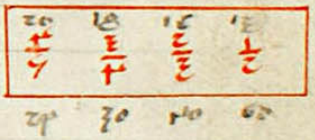
Rurſ⁹ ſi diꝯit q⁹ ipi⁹ capitale ſit 17/19 ℔ 4 7 ĩ fine deor̃ triũ uiagior ip⁹
capitale ei remanſiſſe ꝓpoſuit. 7 q̃t ĩ uno quoq⁹ expendebat uiagio q̃ſi

expẽdiũ
14

erit. repiet ꝑ ſẽpt̃a. 47 ĩ quib⁹ mł̃ca 14/19 ℔ 4 7 diuide ꝑ 17℔ eribũ 14
ꝑ ipi⁹ expendio. Cterũ ſi ꝓpoſuit q⁹ expendiũ ſit 14 7 ĩ fine
uiagior remanſit ei dr̃ ℔ 4 7 ulẽ ſuũ capitale. mł̃. 14 ꝑ 17℔ erũt
2618 ſẽ que adde ℔ 4 7 uideł ℔ 8 .ſ. 2160 erũt ℔ 7770 q̃ diuide ꝑ

Capitale
12/13 82

147 eribũ 12/13 82 dr̃ — ꝑ ipi⁹ capitale. De hoĩe qui fecit iiii uiagia alimo
Terũ ꝓponat⁹ q⁹ fecerit. uij. uiagia. er quib⁹ ĩ ꝓ⁹ fecit duplũ. 7 expẽdit duo
ĩ eo dr̃ios 12 Jn ſo. de duob⁹ tũ. 7 expendit ĩ eo. dr̃. 16 Cterũ tcio
fecit de tb⁹ uij. et expẽdit. dr̃. 18 Cterũ q̃rto fecit de. uij. v. Cr eũ
ibidẽ. dr̃. 10 expendert. nil ei remanſit. Suſceptũ uiagi demõſtra
tcoib⁹ ꝑ duplo ꝑmi uiagij ſcribet 1/2 Cr ꝑ duob⁹ tũ ſi ſcribet 2/2
Cr ꝑ trib⁹ uij. tcij ſcribe 2/4 Cr ꝑ. uij. q̃ti q̃rti uiagij ſcribe 4/8
Cr poſtea ita ꝑ ordinẽ 4/8 2/4 2/2 1/1 mł̃ca 2 ꝑ 2 que ꝑ ℔ 4 q̃ ꝑ 8
que ſiũt ſub ungul⁹ erũt 120 que hũmõi loco expendij uni⁹cuiq⁹ ua
gij. Q̃ 2 ꝯ. diminuũ eor̃ erũt 60 q̃ hãnt loco capitalis ſufficientis ꝑ
mo expendio. Ita eũ de 60 duplũ fiant ueĩunt .ſ. 120 .ſ. expẽdiũ ꝑ
mũ. ſ-urſ⁹ 2/2 de 60 .ſ. 120 hãnt loco capitalis ſcdi uiagij. Ita dupli
antes ipſi fuerũt 80 de quib⁹ ſi fiant tres de duob⁹ hoc ẽ ſi fiadant di
midiũ de 80 ſẽ 80 ueĩent 120 .ſ. expendiũ ſcdm. de quib⁹ 2/3 ℔ 80 ſi ac
cipiant 2/3 ueĩent 20 q̃ hãnt loco capitalis tcij uiagij. Ita duplicant



qñ in p̄mo magio fuerūt 60 quib⁹ fuerūt trib⁹ de duob⁹ uēient 30 de
quib⁹ fuerūt 15 de 7 .l. addūt tcia pte eor sñ ea fuerūt 12 0 .l. expen
dūt tcia. tcia accepta $\frac{5}{4}$ er 7 0 uēiūt 7 15 q̄ sñ loco capitalis ultim
expendi. q̄ er ip̄is fuūt 15 8 in p̄o magio de quib⁹ in fo fuūt 7 7 .l. de du
ob⁹ ter de quib⁹ in tcio fuūt 3 6 .l. de tb⁹ uñ. de quib⁹ 2 fuūt 12 0 in q̄r
to magio .l. de uñ. $\frac{1}{4}$ q̄nq. hoc ē expendū q̄rta magi. Possūt 2 hy nūi ab-
reperi 2 ponūt in ordine $\frac{5}{4}$ $\frac{7}{15}$ $\frac{7}{2}$ $\frac{1}{2}$ qlt. 1 q ē sñ 7 p 7 que p 15 q̄
p 4 que sñ sb unū. erūt 60 .l. dimidū de 12 0 Jce mlca de 1 p
7 que sñ sñ 7 que p 15 que p 4 que sūt sb unū. erūt 15 0 .l.
$\frac{7}{15}$ de 60 p̄dc̄ de ñ mlca 1 p 7 que p 7 que sñ sb ūga erū 60
que mlca p 4 erūt 7 0 p $\frac{7}{15}$ de 15 0 Ad ultimū quidē mlca 1 p
7 que p 7 que p 15 que sñ sup ūgul erūt 7 15 .l. $\frac{15}{4}$ de 7 0 Cog
expendū p̄mi magi sūt p̄portionale g̃ ē sñ 12 0 ē ad 60 ita 17 ēd
ē capitale p̄mi expendi. Cū mlcabis 17 p 60 erūt 78 0 q̄ dumdē p
12 0 et hebit capitale p̄mi magi. Sūt p expendū sm sūt 16 p
portionale eū sñ 12 0 ē ad 15 0 ita 16 ē ad capitale 3i magi. Cū
mlcabis 16 p 15 0 et dumdē p 12 0 et hebis capitale sēti expēdi.
p̄portionale g̃ mlcabis 18 p 7 0 et 7 0 p 7 15 et sūt 45 0 et 15 8 0 q̄ dimi
dē p 12 0 et hebis capitale tcij q̄rti. q̄ expendi. Cog unūqd̄ sūt
ex sūis .l. 78 0 et 67 0 et 45 0 et 15 8 0 dumdē p 12 0 adde
et sūt sūt erūt 7 15 0 que dumdē sūt un̄ p 12 0 erūt 3rij 7 0 p
ip̄i capitali.

Si hec ūsa nō inuestigare uel q. sūt q̄rto magio de uñ. sec q̄nq. 7 sic hūt
expendū ultim .l. 7 0 g̃. uñ. p̄tes 7 0 fuerūt capitale 7 q̄nta pt̄s sūt luc.
Cū si de 7 0 accepim $\frac{5}{4}$ ora erūt 16 q̄ hūt sic p̄ tcia expendū q̄
expendi addo eū 1 g fuerūt 7 15 et tot drīos hūt eū de tb⁹ fecerat
uñ. Cū acc. $\frac{7}{15}$ de 7 15 .l. mlca 7 p 7 15 et dumdē p 15 erūt 3 7 4 et
tot hūt p̄ de duob⁹ sec tia. Cū acc. $\frac{7}{7}$ eor erūt $\frac{21}{2}$ 7 7 et tot hūt
p̄mi expendū q̄ fuer drīos 1 7 q̄ 4 simil uēiēs fuerūt $\frac{1}{2}$ 15 1
et tot hūt ex duplo q̄ fecer in p̄mo magio. Cū dimidū eor .l. $\frac{1}{2}$ 7 0
fuūt capitale ip̄i ut inuenū ē sup̄.

Ponat 4 fuerat uñ. magi remansisse ei drī. 17 q̄ 15 p septē fr
capitale q̄rti expendi. g̃ de 15 que hūt a principio fuerūt in fine 12 0
g̃ sñ 12 0 sr ad 15 que remanse ponūt erūt ad eor capitale
Cū mlcabis 12 p 15 erūt 7 8 8 que dumdē p 12 0 hec acc. $\frac{1}{4}$
de 12 erūt $\frac{7}{4}$ 7 que adde eū inuento capitali eū $\frac{1}{2}$ 7 0 erūt $\frac{11}{14}$ 77
vl 7 8 8 adde eū 7 15 0 p̄dc̄ erūt 7 7 7 8 q̄ dumdē p 12 0 erūt
filie $\frac{11}{14}$ 77 p ip̄i capitali. Cū 4 inuenirē p modū ūsū si ip̄m inuenire
scirē.

p scdm expēdū q̄ fuūt dom 16 q̄
adde ī simil erūt $\frac{1}{2}$ 15 7 et tot hūt

Et in fine anni predicti magistri ei sunt remanserint capitale. scilicet ut supra 12 et 24 et erunt 36 de 12 remanent 6 ex quibus diuide 24 et habebis $\frac{1}{2}$ 4 pro tribus capitalibus. Et hoc facient quia 24 est numerus qui de magistro in magistrum per eorum lucra surgit in 12 in quarto magistro. Et quia ponitur ei in fine sui remansisse capitale. ideo extrahenda sunt 24 de 12 remanent 6 quia 6 habent locum unius de quo sumunt expense et 12 hinc pro eodem numero pro capitali tripli. loco eorum. Et quia de $\frac{1}{2}$ 12 et de eorum lucro quicunque ofint expense. quia capitale tripli fuit $\frac{1}{2}$ 12 nil ei remanet pro expendia ideo illes sunt de 6 unde fiant 6 ad 12. ita $\frac{1}{2}$ 12 ad numerum fuisse capitale expensum. Et multiplicanda sunt $\frac{1}{2}$ 12 per 12 que multiplicata 144 que dividenda sunt per 6 ut supra fecimus. Et ut si ponatur ipsum lucrum esse denariorum 12 quod dempto de 24 lucrum 6 et si sunt 6 fiat ad 24 ita si ad eorum capitale. Et multiplicabis 12 per 24 et divides per 6 hoc est accipies $\frac{1}{4}$ de 12 unde 4 que adde cum $\frac{1}{2}$ 12 et erunt $\frac{5}{12}$ 12 $\frac{1}{2}$ 12

Hoc lucrum sit ide de magistro in magistrum. et capitale tripli sit $\frac{1}{2}$ 12 et expendium finis sit 12 pro. Expendium quodcunque istum sit 12 pro fo. quorum unum expendium sit 12 pro. Expendium unicuique magistro fuisse sub eodem numero 12 et 60 et 24 et 12 et 12 Post hoc multiplicabis $\frac{1}{2}$ 12 per 12 erunt 144 quota sua est 12 in quibus finis expendium excedit primum multiplicabis per 24 quod huius loco capitale fuisse expendit. ergo 12 et 4 in quibus istum expendium excedit primum multiplicabis per 12 erunt 48 sed 7 in quibus ultimum expendium excedit primum multiplicabis per 12 cum tripli 12 huius loco capitale existit. ergo 36 pendit. erunt 168 quod adde cum 48 ergo cum 12 in numero erunt 228 que extrahe de 144 remanebunt 2 002 quod divide per 48 quod quicunque est addunt de 60 cum 24 et cum 12 et cum 12 erunt 1 12 per primo expendio. Et si capitale tripli fuit $\frac{11}{24}$ 12 et in fine pro expendia pedum remanet ei 12. multiplicabis 12 per 12 erunt 288 quod adde cum 288 erunt 576 quod extrahe et multiplicate de $\frac{11}{24}$ 12 in 12 de 7 12 8 remanebunt 2 002 quod divide per 48 erunt similiter 12 per primo expendio. Et si capitale fuisse $\frac{5}{12}$ 12 et in fine remansisse tripli capitale et quatuor expendia extrahes 12 de 12 remanebit 6 per que multiplicabis $\frac{5}{12}$ 12 erunt 144 de quibus extrahe supra 288 remanent 2 002 que divide per 48 erunt similiter 12 per primo expendio. Et si capitale fuit $\frac{5}{12}$ 12 et in fine lucrent denarios 12 multiplicabis $\frac{5}{12}$ 12 per 6 erunt 360 quod 12 quota sua multiplicabis per 12 erunt 480 quod adde cum 288 simul dabis erunt 768 que extrahe 720 suarum remanent 2 002 quod divide per 48 erunt similiter 12 per primo expendio. Si finis expendium est 16 denarii est 8 quorum est 12

Item quidam fecit magio duplum. in secundo de duobus tal. in tercio de duobus

tale ꝓpi ē 22 et erpēdiū fm ē 24 ꝑ tcuī 26 q̄rū 28 ē-uel si
ꝑ fine ꝓpoit hui capitale remanē inuēiet m̄ supdō q ꝑ q̄nq; sūme dimi
nuūt rebꝫ 7/12 6 et dīꝫ 1/24 18 equant̄ uni sūne. q̄r. uīj. sūme equant̄
rebꝫ 5/12 6 et dīꝫ 1/24 18 Pone naq; 9 ꝓ re. q̄r rel 5/12 6 cū dīꝫ
1/24 18 fē 7 6 que equant̄. uīj. sūmā. g̃ sūma ē 1 9 ℓ. capitale
ꝓpō. q̄ Si si ꝓpoīat ꝓpin lucratū ēē dīoꝫ 12 inuēiet q. uīj. sūme
equāt̄ rebꝫ 5/12 6 et dīꝫ 1/24 20 Pone naq; rē ēē 9 q̄r rel 5/12 6
cū dīꝫ 1/24 20 fē 8 8 quor 3/24 ℓ. 22 ē capitale.
Si ꝑ regulā isti hāc ultimā q̄onē solue uīs. q. ī fine ꝓpō remāsille
capitale ꝓpōit 12 g̃ remānsiue ei sūma er 12 Post ultīm erpēdiū
q̄ fuerē qb̄ fuit rel 7 dīꝫ 7 quib̄ sūmt nūeris erit sūma 7 rel 7 dīꝫ 19
q̄ habit cū de 24 fecit 4 q̄r ereit acē 24/4 unī sūme et 24/4 unī
re et 1/4 19 et tot hūit ī fine tr̄j uiagij. cui q̄b̄ adde erpendiū ꝓpi u
iagij rē ꝓdīt 4 erit 24/4 sume et 2/4 rei et dīr. 1/4 20 et tot
hūit ꝓ̄ḡ de 2 fecerat 1 q̄r acē 2/24 eox erūt 2/4 sūme et
rei 22/20 rei et dīr 2/20 19 et tot hūit ī fine 3i uiagij. cui q̄b̄ adde
erpendiū eide uiagij 3 rē ꝓdīt 2 erit 2/4 sūme 24/20 rei 7 dīr
2/20 18 et tot hūit cui de 2 fecerat 2 q̄r acē 2/24 eox erē
2/4 sūme et 24/20 rei et dīr 1/10 2 et tot hūit ī fine ꝑmi uiagij.
cui q̄b̄ adde erpendiū ꝓpi ℓ. rē erit 2/4 sūme et 77/20 rei 7 dīr 1/10 12
et tot hūit et ouplo ꝓmi uiagij q̄ dimidia et ꝓcient 3/4 sūme
et 77/60 rei et dīr 1/20 6 que equant̄ sūme ℓ. capitali q̄r erit cū 3/4
hūe remanebit 24/4 sūme que equāt̄ rei 77/60 rei et dīr 1/20 6 q̄r
q̄ncuplū de 24/4 unī sūme ℓ sūme. uīj. equāt̄ q̄ncuplo de 77/60 rei
et dīꝫ 1/20 6 hec ē rel 5/12 6 et dīꝫ 1/24 20 ut supi ꝓregulā recti
ꝓ̄ḡm. Demcpto ꝓpterea ut hui ℓ. fm. alīū modū solēnes hui. uīj.
q̄stionū inuēire uīs. ꝓ̄ce. ꝓcedine ut supi 24/4 2/24 2/2 1/2 et q̄b̄ ut supi sūmi
ad 120 et 60 et 24 0 et 20 et 24 et 144 et q̄ addes cū 24 28 24 28
tottent 144 dom̄ ꝓpōat nūs qui integrab̄ ꝑ 120 dīmdat et hoc erit
ingeties ē q̄ minus 144 ꝑ 22 facit 40 8 2 cui q̄b̄ addit 24 28
ꝓpōat 44 2 0 quib̄ dīmit ꝑ 120 rēnāt 24 6 ꝓ capitale et erpē-
dīi ꝓmū erit 22 Si si uis ut ī fine maiorē rēmeat dīr. 12 ut dem ē
mille 12 ꝑ 24 ꝓpōat erūt 28 8 que adde cui 24 28 erūt 72 6 cui
q̄b̄ addes tottens 144 dom̄ ꝓpōat nūs qui integrab̄ dīmdat ꝑ 120
erūt ergo ingeties semel. sūt et 21 in 144 ꝓpōat 22 22 24 cui q̄b̄
addit 72 6 erūt 2960 q̄b̄ dīmit ꝑ 120 rēmanet 22 ꝓ capi
tale et erpendiū ꝓmū erit 21 ut iuēiū ē ℓ Si si uis ut
ī fine maiorē suū remaneat capitale erūnt 24 de 120 ℓ. mīa
phorū nūcr quotūq; sit ingeties et mīcrōne maior qui sit sub ipis re

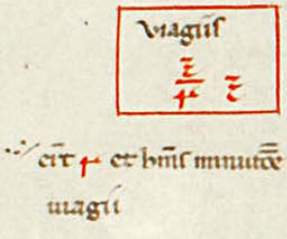
minebūt ꝯ 6 denū. adde sūp ꝛ 7 8 totens 1 4 ꝛ dom̄ pueīt nūs eū nonagesima serta pars sit integra. 7 hoc erit notes qz er mlcatōne de ꝯ in 1 4 ꝛ ueīunt 1 7 8 6 quib̄ additis eū ꝛ 7 8 erūt 18 7 ꝛ q̄ diuide p ꝯ 6 ueīunt 1 ꝯ p capitale. et exp̄edui p̄mū erit ꝯ ut supꝫ. Silr si lucrat fuit dūos 12 īfine sūp 7 7. 6 addes totens 1 4 ꝛ donec pueīat nūs qui integralr diuidat p ꝯ 6 et hoc erit notes qz ex ducis ꝯ in 1 4 ꝛ fiebāt 1 7 8 6 quib̄ additis 7 7 6 pueīūt 7 1 12 q̄ diuide p ꝯ 6 ueīunt p capitale et p̄mū expendū ē ꝯ ut supꝫ ueīmꝫ. ē quidā habet bisōs 17

Modus aliꝰ de magis

Ecū ipis fecit magna relatio q̄r. 7 īuno quoq; faciebat duplū. et expendebat bisōs 1 ꝛ Quereb̄ quantas suos magos. Ql faciebat duplū. duplicet 1 7 erūt 2 6 de q̄b̄ ertrahe 1 ꝛ remanēt 1 2 7 hīs unū magū. Sc̄ duplicet 1 2 erūt 2 ꝛ de q̄b̄ ertrahe 1 ꝛ remanēt 10 et hīs duo magna. de q̄b̄ puideis minutōnē sin capitalis de magno in magū. In p̄mo magno remāserūt ei 12 g̃ minuit 1 suū capitale. 7 sc̄ minuit 2 ideo qz remāserūt ei 10 g̃ duplicādo uadit minutōnē de magno īmagū. q̄r duplicet 2 que sūt minuta sūt magis, adde m tres minutos trū magnos suetos videl 1 et 2 et ꝛ erūt 7 a q̄b̄ ns 1 12 detūr 6 q̄ remanēt īminutōe q̄rti magi. s. ꝛ erūt 8 in quib̄ diuide 6. ueīunt $\frac{2}{ꝛ}$ unū magi. g̃ facit ipe ē ipis bisāthis magna $\frac{2}{ꝛ}$ 2 Sz qz ūr ingrui dīe aliq̄ fecisse $\frac{2}{ꝛ}$ unū magi. hoc ēnt dari sic accem. Videl eū īmagno faciat duplū. g̃ 1 lucrat aliū. g̃ 1 $\frac{2}{ꝛ}$ unū magi de ipo 1 lucrat $\frac{2}{ꝛ}$ unū bisāthi. g̃ fiet de ꝛ septē et erūt. uñ. magna. et q̄b̄ īp̄mo 7 īsc̄o 7 īterio fecit duplū. 7 expendit 1 ꝛ et īq̄rto fecit de. uñ. vi. 7 expendit tres q̄rtas de 1 ꝛ .s. $\frac{1}{2}$ 10 Decē autē ēnt si ꝓpositū fuit q̄ īfine ignotos magos ei sūsint bis ꝛ sic erit faciend. s. ertrahes ꝛ de supiꝰ minutos trū magos q̄ ei remanz de suo capitali videl de 6 qui supi p 8 diuidit remanēt 2 q̄ diuide iām p eāde 8 .s. p minutōnē q̄rti magi. erit $\frac{1}{ꝛ}$ g̃ facit ipe magna $\frac{1}{ꝛ}$ 2 Jām si de q̄rto unī magi unū magnū instruere uolu erit. ei īme⁹ magno lucrē de 1 bis. alū. g̃ 1 $\frac{1}{ꝛ}$ unī magi de 1 lucrat q̄rtū p̄ē unī bis. g̃ de 1 fiet $\frac{1}{ꝛ}$ 1 hoc ē de. uñ. q̄nq. 7 expendit īipo q̄rtū p̄ē de 1 ꝛ .i. $\frac{1}{2}$ 2 Si aūt nūs q̄sita supradcōis. i. ꝛ maior fuit dcē supradcōis trū magos. s. de 6 uñ nō possit ipm ertrahere ab eāde. Oporteret ei ertrahere de residuo minutōis duos magos. q. ei remanz de suo capitali. i. de 10 Et si adhuc ei de 10 ertrahere nō posset. ertraheres ei de 12 .i. de supiꝰ minutōis p̄mi magi. Et sic poteris innūere ꝓpositas q̄stiones.

dam domum

Questio notabilis de hoīe mutuante libras. s. ad usuras sup qua



ert ꝛ et hīs minutōe trū magi

Quidā p̄stitit lib̄r 100 ad usum s. mi. dr̄ios p libr̄ i mēse sup̄ quēdā dom̄.
Perquā recolligebat i uno quoq; āno nōie pensōis lib̄ 20 et i capite
uni cuiq; āni debebat disputare q̄ lib 20 de capitali & lucro dictar
100 librar. Q̄r rit̄ quot āni & mēs lib̄, dieb̄, horis domū teñe debe
bat. q̄ lucrabat dr̄os 1 p libr̄ i mēse. g̃ lucrat̄ sol 1 p libr̄ i āno
qui sol 1 fuit $\frac{1}{4}$ uni libre. g̃ de 4 fuē 6 Et q̄ de capitali &
luc uni āni disputat̄ pensio. assimilat̄ h̄ q̄o tali uiagior q̄stioni. q̄ h̄
dam h̄uit lb 100 cū quib̄ de 4 faciebat 6 i uno quoq; uiagio & er
pendebat lb 20 de quo q̄r̄it̄ quot ex eis fecerit uiagia. cui regule si
imemor ñ erstiteris minutōnes sui capitalis de āno i āñ subtrh̄ sr̄ inuesti
gande sic. Q̄ a de 4 fuerit 6 acc $\frac{1}{4}$ de 100 q̄ē 20 & adde sr̄
100 erūt 120 et tot h̄uit in̄ capitale & lucrū i p̄mo āno. de quib̄
extrahe pēsionē s. 20 rēmanēt libre 90 a quib̄ usq; i lib̄s 100 que
desūt libre 10 que sūt minutio p̄mi āni. ꝙ tē acc $\frac{1}{4}$ de libris 90
q̄ remanēt i capite p̄mi āni erūt 18 q̄s adde cū 90 erūt 108 de q̄b̄
extrahe pēsionē 2i āni. rēmanēt libre 78 a quib̄ usq; i 90 desūt libre
12 q̄ sūt minutio 2i āni. in p̄mo ē āno sui capitale minuit libras
10 in 2o minuit lb 12 g̃ minutōnes crescūt p̄portionaliter unde h̄ de
10 ad 12 hoc ē sicut 10 sr̄ ad 12 s. sicut 4 ad 6 rta 12 q̄ sr̄ mi
nutio 2i āni. erūt ad minutionē 3ci āni. Q̄ p multiplicat 6 p 12 et
diuidens p 4 exibūt $\frac{72}{4}$ 18 q̄ sr̄ minutio 3ci āni. q̄ multiplicat̄ p 6 & diuidens p 4 exibūt $\frac{72}{4}$ 18 q̄ sr̄ minutio

$\frac{72}{4\,4\,4}$ 20 que sr̄ minutio q̄rti āni. q̄ multiplicat̄ p 6
& diuidens p 4 ex hac sic fit. p multiplicē q̄ndā ligā lb qua p̄dē 4 q̄r
cū sit ē lb uiagia qua uic multiplicet & multiplicat 6 p 12 que sr̄ sr̄ 4 erūt
12 que diuidens p 4 p̄p 4 q̄ tō i capite ligē p̄cte similit p̄dic exibūt
2 et remanēt 2 q̄s ponas 2 sr̄ ligā 4 et 2 reserua i mētē cū q̄b̄
adde multiplicatōnē de 6 in 2 que sr̄ sr̄ sequenti 4 erūt 20 q̄ diuide p
4 exibūt 5 et rēmanet 0 q̄d 0 pone sr̄ sequenti 4 & sic q̄ sr̄ 5 si q̄
adde multiplicatōnē de 6 in 2 q̄ sr̄ sr̄ 4 i capite ligē a parte dextra erūt
22 que diuidas p 4 exibūt 5 et remanēt 2 q̄ 2 p̄dē sup
tertiā 4 et sr̄ 5 adde multiplicatōnē de 6 in 20 erūt 12 5 q̄ diuide p ul
timā 4 & p̄mete ligē exibūt 2 5 et remanēt 5 q̄ 5 pone sr̄ ligā 4
et ad ultimā pone 2 5 et habes $\frac{20\,25}{4\,4\,4\,4}$ 2 5 p minutōe tertii āni
addes q̄dē sup̄ius sc̄r minuatur i hūc modū ponas et eris tertia ligā sb in
tegra & habes fractiones lb sic $\frac{1}{2}$ q̄nas lb q̄nas et q̄nas q̄rtas sb q̄ntas
q̄ntas et octavas. et p̄mete ligā lb quā sr̄ 4 quā s. 5 minus 1 p̄dē & q̄ sr̄ sb
maiori ligā minutionū p̄dictā et p 2 q̄ sr̄ sr̄ 4 q̄ sr̄ i q̄rto gradu
ligē p 2 5 p̄dē sr̄ 2 sr̄ 4 q̄ sr̄ i eodē gradu p̄cte ligē & adde 0 q̄d
ē sr̄ 4 tertij gradus ligē de 2 5 cū 2 q̄ sr̄ i eodē gradu ligē de 20 erūt 2

q̄ ꝑ ponel sīr ⸗ ten gnūs ꝓmete ūge ꝑ adde ꝛ q̄ sr sint ⸗ sedi gnūs
unge de ꝛ⸗ eīl ꝛ q̄ sunt sīl ⸗ sedi gnūs ūge de ꝛo et eīl ꝛ q̄ sr sp
⸗ eīdē sī gnūs ūge de 17 erūt 7 q̄ diuide ꝑ ⸗ sī gnūs ꝓmete
ūge erūbit 1 et remanēt ꝛ pone ꝛ sr q̄l ⸗ et 1 sua ī mūi q̄
adde eīl ⸗ q̄ sunt sr ⸗ ꝓmi gnūs ūge de ꝛ⸗ et eīl ꝛ q̄ sr sr ⸗
eīdē gnūs ūge de ꝛo et eīl 1 q̄ ē ī ꝑmo gnūi de 17 et eīl ꝛ q̄
sr sp ⸗ ꝑ 1⸗ erūt 11 q̄ diuide ꝑ ⸗ ꝑmi gnūs ꝓmete ūge erūbūt ꝛ
remanēt 1 pone quidē 1 sr q̄l ⸗ et ꝛ sua q̄ adde eīl remanet
erūt 99 q̄ pōe eīl ꝓmete ūgā et sic habēt $\frac{2}{4}\frac{2}{4}\frac{2}{4}\frac{1}{4}$ 99 que si
de eētū extrahere uīs ꝓmi hēt alua ūgā sb qua pone sibi ⸗ quasi et
acē ꝛ que sr sr ⸗ q̄rti gnūs ūge de 99 et extrahe eīl de ⸗ q̄ sr
sl ꝓpīq; remanēt ꝛ que pone sr ⸗ q̄rti gnūs ꝓmete ūge et re
ne ī mūi 1 q; adde eīl ꝛ q̄ sr sr ⸗ ten gnūs extrahe et eīdē ⸗
tenet ꝛ q̄ pone sr ⸗ tercii gnūs ꝓmete ūge et remane ī mūi q;
adde eīl que sr sr ten gnūs extrahe et eīdē remanet sua
1 q; adde eīl ꝛ que sr sr ⸗ sr gnūs ūge de 99 erūt ꝛ que
extrahe et ꝑīl ——— unī libre ⸗ remanēt ꝛ q̄ pōe sr ⸗ sedi
gnūs sua 1 q; adde eīl 1 q ꝛ sr ⸗ q̄ sr ī ꝑmo gnūi ūge de
99 erūt ꝛ a quib; usq; ī ⸗ defūt ꝛ q̄ pone sr ⸗ ꝑmi gnūs
ūge ꝓmete et ꝑ expleto q̄drio sua 1 q; adde eīl 99 faciūt 100 q̄
extrahe de 100 remanēt ām ꝓmeta ūgā .ī. nichil. et sic hēt $\frac{2}{4}\frac{2}{4}\frac{2}{4}\frac{2}{4}$
ꝑ q̄drio reliquo unī libre q̄ sr et minutie septimi ām.
q̄ꝛ muciendi ē minutio septimi ām si miscabit $\frac{2}{4}\frac{0}{4}\frac{2}{4}\frac{1}{4}$ ⸗ 24
qui ē minutio sexti ām ꝑ 6 et diuide ꝑ ⸗ erūbūt libre
$\frac{2}{4}\frac{2}{4}\frac{2}{4}\frac{1}{4}\frac{1}{4}$ 20 a quib; diuidenda eēnt $\frac{1}{6}\frac{1}{2}\frac{8}{4}$ et q; er diuidē
erunt eēt illud q; ipse remanit domīi ultī ser mucrol ām. ⸗ ut ham
in diei ⸗ horal misca ⸗ ꝛ 8 ꝑ diei ām. .ī. ꝑ ꝛ 60 ut ita ponāt ⸗ erūt
ī unoquoq; mīste diei. xxx. mcient 1 4 7 6 8 0 que misca ꝑ 12 ⸗
horal diei. erūt 1 8 9 ꝛ 1 6 0 q̄ sua ⸗ et misca ꝛ 9 ꝑ minuta sue ūgle
hoc ē ꝑ ⸗ 7 adde ⸗ que ꝑ ⸗ 7 addas 1 que ꝑ ⸗ et addas ꝛ
que ꝑ ⸗ et addas 7 que erūt 9 ꝛ 2 12 quib; repias ⸗ regulam
q̄ ē $\frac{1}{2}\frac{0}{8}\frac{0}{8}\frac{0}{9}\frac{0}{9}\frac{0}{9}$ debes diuidere misceōnē de 1 8 9 ꝛ 1 6 0 ī ⸗ qui
ī ⸗ qui in ⸗ qui ī ⸗ qui in ⸗ ut q̄nq; q̄nariol q sr 18 ūgle
ꝑ ꝛ 9 ⸗ reliquel misceōnē. nij. q̄nariol ꝑ nij. q̄nariol q sr regla
de 6 ꝛ ⸗ sibi cuitabis ea q̄ erūt ꝓtenda ꝛ ꝓcient horie $\frac{1}{2}\frac{7}{9}$ 101
q̄ sunt diei 8 et horie $\frac{1}{2}\frac{7}{9}$ ⸗ et rām remanit ipe domīi ultī ām. 6
nemol. q ⸗ si plane usq; unde si de $\frac{1}{6}\frac{1}{2}\frac{8}{4}$ unī ꝑ que sr sol $\frac{2}{1}\frac{2}{4}$ 11
et de eoz usuris diez ꝓcientiū $\frac{1}{2}\frac{7}{9}\frac{2}{12}$ 8 ꝓcienti ꝓcio ꝓcio diei
q̄ uidend ē ꝑ modū baniei ī hūc modū q; de .l. 1 dum ꝑ rām

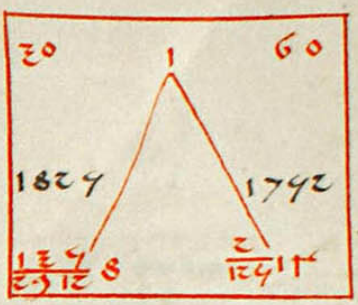
	10
	12
$\frac{2}{4}$	14
$\frac{2}{4}\frac{1}{4}$	17
$\frac{2}{4}\frac{2}{4}\frac{2}{4}$	20
$\frac{2}{4}\frac{2}{4}\frac{2}{4}\frac{1}{4}$ 99	$\frac{2}{4}\frac{0}{4}\frac{2}{4}\frac{4}{4}$ 24

ꝑ ⸗ et addas ꝛ

⸗ sī ām erūt regla de 6 ꝛ ⸗
q̄ ē $\frac{1}{4}\frac{0}{4}\frac{0}{4}\frac{6}{4}$

dr ℔ ℊ℔ ℘ sol 60 dat sol 1 minute. Q℔ pōe i una lnea sol 60
er 1 er diet 0 hab ℔ 60 pone ℔ 1/12 4 1′ et sb diet 0 pone
diet 1/2 ℨ 1/12 8 et mlcabis 1/12 4 1′ ℘ 1 q ē eiser adūso q mlt ℘ 1/2 ℨ 1/12 8
et sūmā minuc ℘ rehāt duo mūol. s. ℘ 60 et ℘ 0 ℊ mlt 1 4 2
℘ 1 8 2 4 et diu del ℘ 60 et ℘ 0 et ℘ fuerūnel q sr sb utrūq
unga ℨ hebis usurā soldoz 1/12 4 1′ q eū debeat ītrmt addē. s. ca
pitale eū usris. quāh ea ginūt hās idicabo. q. er mlcatōe de 1℔ 12 4
additl 2 ꝑuenit 1 4 2 ℊ si diuiseris 1 4 2 ℘ 12 4 nimirū
ipa 1/12 4 1′ reddibē silr si 2 8 8 0 0 q pereāt er 60 ducūs
2 0 uicib 12 uicib 9 uicib 2 mltpheaūt ℘ 1 4 2 et di
uiseris sūmā ℘ 60 et ℘ 0 et ℘ 12 et ℘ 9 et ℘ 2 et ℘ 12 4
eadē 1/12 4 1′ reddibt. Sz er mlcatōe de 1 4 2 ℨ 1 8 2 4 diuisa ℘
coldē mūol ꝑuenit ultima illoz ℔ 1/12 4 1′ ℊ si ginūtū er 2 8 8 0 0
eū 1 8 2 4 .s. 2 9 0 6 2 4 mlcauerit ℘ 1 4 2 et diuiseris ꝑ eosdem
mūol ꝑuenient ℔ 1/12 4 1′ et eoz usuru. ī quib si modū euitandi
huiusl remanebit tm mlcatio de 7 2 in 12 4 diuidendi 1/6 9 12
vii ꝑuenit ℔ 4/6 8/9 0/12 1′ q sūt pensio diez 1/2 ℨ 1/12 8 q si ml
catis 1/2 ℨ 1/12 8 ℘ diol 2 0 q sūt pensio unī diei. nimirū ℔ 4/6 8/9 0/12 1′
ꝑuenient. **Alter de eadem domo**

Rsus si dēm fuit q ipse cuī dom̄ erat recollegit ipam domū tali tpe
q adhuc erat ei reddit̄ libus 2 0 de ꝑdcis libris 1 0 0 et q
nat q̄ncū ipe qui diez ꝑstituerat domū tenuit. Sic facies. jungez
et minutiōib itūl qual supi tuēmi dom̄ si rēmeat de ipis libris.
1 0 0 tantū q. possit ill domū unū ānū tenē. et cētus lib 2 0 q
ei debent rēdāē. a minuto q̄dē ꝑmi ām ē 1 0 si 12 ītrmt mūc
tl faciūt 2 2 eū q̄b addiū tcij ām minutōe. s. 2/4 1′ faciūt
2/4 2 6 eū q̄b adde 2/4 1/4 17 q̄rti ānī. erūt 2/4 2/4 92 eū
q̄b itm adde minutiōe q̄nti ām. s. 2/4 2/4 2/4 2 0 erūt 2/4 0/4 2/4 7 1′
a quib usq; in 1 0 0 desūt 2/4 1′/4 2/4 24 de quib si ertmueris hūus 2 0
q debent supme. nō rēmebit ill domū possit tenē ꝑ unū ānū. Q℔ ert
hant 2 0 er ipis remanēt 2/4 1′/4 2/4 4 q mlcet ꝑ 2 60 .s. ꝑ diez u
nī ām que ꝑ 12 hyoml. ꝛ dīnde sūmā dēe mlcatōis ꝑ minutōnem
seru ām. videz ꝑ 2/4 0/4 2/4 1′/4 24 Tm caue ne mlcet aliquē dēoz
nūoz eū aliquo ipoz debeat ꝑi dīnde ut ī ꝓcedēti regula demōst
tmum. erūt hore 1′/4 9 0 9 que fr diez 8 0 ꝛ hore 1′/4 9 et
tot tenuit ipe domū ultra ānos 4
Si uerū ē tra cognoscē usum de 1 0 0 libroz ꝑmi ām sr ℔ 2 0 q
additl eū 1 0 0 erūt 1 2 0 de quib ertracta pensōne rēmēt 1 9 0
eū quib additl usurē ipāz .s. ī fēdo ānno fuerūt 1 0 8 de q̄b ertracta



anni	diei	horae
6	8	1/16 1/2 4

anni	diei	horae
4	80	1′/4 9

pensione eidē ām remanēt l' 7 8 quib' usuris tcij ām fiūdum fuer
ūt libras 3/4 7 2 de qb' extracta pēsone eidē tcij ām remanēt 3/4 6 2
7 sic faciendo. de qrto 7 quīto āno remanebīt tm l' 3/4 4/4 4/4 2 4 de qb'
ipe tenuit domū dieb' 5/7 2/12 80 hoc ē dieb' 8 0 et hous 5/7
et remāserīt ei l' 2 0 qs dns dom' reddidit ei. deīn accepit qn
tū usuras dr' de libra 1 In ill' dieb' 5/7 2/12 80 qr sic erit videnđ.
mlca dr'os 1' .s. usuras unī libre i mse p diem 5/7 2/12 80 et deinde
p diem 2 0 .s. p mense exibūt dr'ij 2/2 6/7 10 qs adde ē libra 1
hoc erūt sol' 2 0 7 dr' 1/2 8/7 6/7 10 et tm ascendit una libra mō capi
tale 7 usuras in illis 5/7 2/12 80 dieb' que s. 1/2 8/7 6/7 10/12 0/20 1 mlca p p 2/4 4/4 2 4
redduīt libre 2/2 6/7 7/12 5/20 6 mō capitale 7 pficuū i illis dieb' 5/7 2/12 80
de quib' si extraveris pēsionē que eueīt i illis dieb' 5/7 2/12 80 que ē
libre 2/2 6/7 7/12 15/20 remanebīt tm libr 2 sm qr ꝓpositū fuit. De eōdo
Si ꝓponat qr qdā ꝓstauit sr eidē domū libr 6 ad eisdē usuras 7 mo
quat qmū ipam domū teñe debeat. sic faciem. adde libras cū
pensone unī ām. s. cū 2 0 erūt libre 2 6 quas mlca p 6 7 diuī
de p 6 exibō libre 2 0 7 tm oportet qr ipe hīeat ut domū teñe
possit ām 1 7 deīceps remanerēt ꝓposite l' 6 7 extracte d 6 de
2 0 remanēt 2 4 que eēt minutio eidē ām q mlca p 6 de
ꝓportione sup' iuēta 7 diuīde p 4 exibō 5/7 2 8 q ēēt minu
tio alt' ām. s. illī de q ipe p ipis 6 libris domū teñe dz. qr mlca p
6 p 2 60 dies. s. p ām 7 diuīde p 5/7 2 8 exibō dies 7 4 quesr
mensis 1/2 2 et tm tenebit ipe domū p ꝓscriptis libris 6 et sic
poteris de multis similib' operari. De homīe qui prestauit ad usum suum nona
Si qdā ꝓstauit dr'os ad eisdē usuras nescio qr. 7 debebat dare p ām
p pensone eidē dom' libras 2 0 Tenuit ē domū p ill' dr's ānis 4
7 dieb' 7 0 Querē quātitat illoz dr'oz. p'm sīqdē icipiendo ē adi
eb' 7 0 videlz ut videat p qr dr'os 7 0 dieb' domū teñe possit.
Cruīp ut videnđ. qr usura unī ām ē 1/4 tot' capital'. oportet
mlcare dies ām p 4 erūt 1 8 0 sr qs adde dies ꝓceptos 7 0 erūt
1 8 7 0 q' i illis dieb' 7 0 de 1 8 0 fiat 1 8 7 0 hoc ē qr de
1 8 0 fiat 1 8 7 qs pōe sr 1 8 0 sr 1 8 7 sic 180/187 deīn
de quanta sit pēsio illoz 7 0 dier sic mlca 2 0 p 7 0 7
diuīde p 2 60 prouenit p pēsone illoz 7 0 dier 2/8 4 quas
mlca p 1 8 0 7 diuīde p 1 8 7 exibūt libre 115/187 4 quib' oīb
explicatis. ad regulā uiagioz hāc poteris assimilari videlz p 4 an
nis dicas qnq; uiagia. In qb' singularīt de 4 fiat 6 7 expendit i
unoquoq; l' 2 0 .s. pensonē. et i fine uiagioz ānoz 4 hoc ē 4
ānoz remanēt ei l' 115/187 4 eū quib' tenebit domū dieb' 7 0 qr

ur sup̄ accum̄ scribenda sit ℥ 5/6 q̄libet ℥ ordine sic ℥ 5/6 5/6 5/6 5/6 5/6
dem̄ mlcabit 6 ℔ 6 que ℔ 6 que ℔q̄ ℔ 6. s. ℔ om̄s nūor qui
fuit sb̄ ugul erit 7 7 7 6 de quib̄ accepe ℥ 5/6 que sit 6 ℔ 8 0 de quib̄
acc 5/6 que sit 4 ℔ 0 0 de quib̄ acc 5/6 que sit ℔ 4 0 0 de q̄lb̄ acc
5/6 que sit ℥ 7 4 0 de quib̄ acc 5/6 que sit ℥ 1 1 4 dem̄ adde
6 ℔ 8 0 cū 4 ℔ 0 0 et cū ℔ 4 0 0 et cū ℥ 7 4 0 et
cū ℥ 1 1 4 erūt ℥ ℥ 2 4 4 que mlca ℔ libras ℥ 0 pensio
mlc erūt 6 9 7 6 4 0 Jst mlca ℥ 1 1 4 ℔ 115/187 4 et sūma q̄ erit
rit adde cū 6 9 7 6 4 0 et caudmatā sūmā diuide p regulā de
7 7 7 6 que ē 1000000/666666 eribūt libr 91/66 6/11 16/17 91 et tanta
fuit q̄ntitas dr̄ior illor q̄s tē ꝓstituerat alr̄ poter ad hāc eīdē q̄ntitatē
℔ p̄ vsū deuenire. obligū. pensionē q̄libet ām. s. ℥ 0 adde cū 115/187 4
erūt 115/187 ℥ 4 que mlca ℔ 4 7 diuide ℔ 6 ideo q. de 4 suā
6 vnoquoq; āno eribūt 6/11 11/17 2 9 Et hoc ē illud q̄ remāserat
cū sū domū ℔ ām̄ tenuerat. Sē que adde pensionē quarti ām erūt
6/11 11/17 4 9 que mlca ℔ 4 7 diuide ℔ 6 eribūt 7/11 12/17 ℔ 9 et
cū remanserat ei cū tā domū ām̄s trib̄ tenuerat. Q2 adde eū ℥ 0 s.
cū pēsione tert ām̄ erūt 6/11 12/17 7 9 q̄ mlca ℔ 4 7 diuide ℔ 6 eribūt
6/11 12/17 6 6 et cū remāserat ei pq̄ domū ām̄s tenuerat. cū quib̄
adde ℥ 0 s. pensionē sexti ām̄ erūt 6/11 7/17 2 6 q̄ mlca ℔ 4 et
diuide ℔ 6 eribūt 1 ℥ 6/11 16/17 8 0 et cū remāserat ei cū tā domū vno
āno tenuerat. Q2 adde eū pensionē ꝑmi āni erūt 1 ℥ 6/11 16/17 11 0 q̄ mlca
℔ 4 7 diuide ℔ 6 eribūt 5 1 6/6 11/11 16/17 9 1 q̄ sūt ℔ 9 1 et sol 19 et
dr̄ij 6/11 16/17 4 et cū ꝓstituerat ipē sup̄ domū ut sup̄ ℔ aliā regulam
inuenim̄. De eodem

Num si ꝓpositū fuit q̄ capitale illi⁹ sit libre 5 1 6/6 16/11 17/17 91 et cū ipis ad
eīdē vsum̄ teneret domū ām̄s 4 et dieb̄ 7 0 7 q̄reret mutuū pē
sionis quātitatē. Sic fiet. pone ut pensio sit aliq̄s nūs ut dicam̄ ℥ 6
rem̄ unde ꝑm ꝓscriptū erit nīe deinde ℔ pensionē i vnoquoq; āno. libr
℥ 6 quātū ei hīre opōtuit ut domū in ualeāt tenē ꝓscriptus ām̄s 4
7 dieb̄ 7 0 q̄ si bñ repire repire teneret repiet q̄ cū opōtuit hīre ℔
1 ℥ 6/11 16/17 11 0 q̄ cū eēnt 5 1 6/6 16/11 17/17 91 ut ℔ imo eēssem ꝓpositū. hoc ē q̄
pensio mutuū eēt ℔ ℥ 6 q̄ cū nō sit eadē regula ꝓportionalr. hoc ē q̄
sicut ℔ 1 ℥ 6/11 16/17 11 0 sit ad ℔ 5 1 6/6 16/11 17/17 91 ita erit ℥ 6 ad q̄sitā
tā pensionē q̄libet q̄ ℥ 6 ℔. 5 1 6/6 16/11 17/17 91 7 diuidet ℔ 1 ℥ 6/11 16/17 11 0
eribūt ℔ q̄sita pēsione libr ℥ 0 ut sup̄dem ē De eadem domo

Sē si ꝓpositū q̄ pensio sit lib ℥ 0 7 teneat ipē domū ām̄s 4 7 dieb̄
7 0 et remanserit ei de hoc q̄ ꝓstituerat sup̄ domū libr ℥ 0 cū pē
sione que stringit illic dieb̄ 7 0 s. cū libris 5/6 4 erūt libr 5/6 ℥ 4

5/6 5/6 5/6 5/6 5/6

lib̄ presbite
7/6 1 6/6 16/11 17/17 91

Solid lib̄ presbite
℔. s. d.
91 1 4 1 6/2 16/11 17/17 4

pensio
℥ 0

q̄ ℥ cent q̄tātē d̄ict̄ ꝓstituerat ꝑmi
sequēd̄ adde l. 20

dcm̃ unde q̃ntū ascendat usura ī illis dieb⁹ 7 o ꝑ ānō quidē ascendit de
4 in 6 fiūt 4 libr lucrat 1 ꝑ ānū. 7 cū dies 7 o fiūt $\frac{7}{26}$ unī
ām fiūt in illis dieb⁹ 7 o libr 4 ascendē in libris $\frac{7}{26}$ 4 hoc ē 180
ī 187 ut supi⁹ diximꝰ. Q ꝛ describes $\frac{180}{187}$ 7 mlca $\frac{5}{6}$ 7 4 ꝑ 180
7 diuide ꝑ 187 exibūt libr $\frac{8}{11}\ \frac{14}{17}$ 7 4 cū quib⁹ adde lb 7 o .s.
pensionē q̃ntū ām erūt libr $\frac{8}{11}\ \frac{14}{17}$ 4 4 quas mlca ꝑ 4 7 diuide ꝑ
6 exibūt $\frac{175}{187}$ 4 4 cū quib⁹ adde 7 o .s. pensionē quarti ām.
erūt lb $\frac{175}{187}$ 4 4 q̃s mlca ꝑ 4 7 diuide ꝑ 6 exibē ꝑ $\frac{175}{187}$ 4 4
cū quib⁹ adde pēsionē 3ciꝯ ām erūt ꝑ $\frac{119}{187}$ 3 7 q̃s mlca ꝑ 4 7 diuide
ꝑ 6 exibē libr $\frac{1}{7}\ \frac{109}{187}$ 77 quib⁹ si adde pensionē 5ti ām undecimꝯ
7 o et mlca sūmā ꝑ 4 7 diuide ꝑ 6 exibē ꝑ $\frac{7}{7}\ \frac{1}{6}\ \frac{177}{187}$ 89
q̃b⁹ si adde pēsionē 6ti ām undecimꝯ 7 o 7 mlca sūmā ꝑ 4 7 diuide
ꝑ 6 exibē libr $\frac{1}{7}\ \frac{7}{6}\ \frac{0}{6}\ \frac{1}{11}\ \frac{12}{17}$ 99 et tm ipe ꝓfitent supi⁹ domū suam
Potest ē hoc idē alit reperire. uidelz reptis libris $\frac{8}{11}\ \frac{14}{17}$ 7 4 sibi reddi
hāc q̃onē ad regulam magiox. dicēs q ꝙdā fecit magna 4 hoc ē
q tenuit dom̃ ānis 4 et ī uno quoq magio de 4 faciebat 6
hoc ē ī uno quoq āno. 7 iñ expendiū faciebat libr 7 o hoc ē dabat
pensionē libr 7 o Et ī fine q̃lib⁹ magiox. s. 4 ānox remansit
ei libr $\frac{8}{11}\ \frac{14}{17}$ 7 4 q̃s describende sic ī ordinē $\frac{5}{6}\ \frac{5}{6}\ \frac{5}{6}\ \frac{5}{6}\ \frac{5}{6}$ et dem
cepi⁹ opabemis sic supi⁹ fuisti opand 7 repies p̃ceptas libr. $\frac{1}{7}\ \frac{7}{6}\ \frac{0}{6}\ \frac{1}{11}\ \frac{12}{17}$ 99
Verū capitale q̃d ipe ꝓfitent sup⁹ domū sit libr $\frac{1}{7}\ \frac{7}{6}\ \frac{0}{6}\ \frac{1}{11}\ \frac{12}{17}$ 99 Vead
7 tenuit cū ipo domū ānis 4 7 dies 7 o 7 remansert ei libr domo
7 o 7 quota sit ex pensio ignorāmis. sic faciel. vide quātū erit
illa capitalis quātitas cū qua faciendo dictū lucrū de āno ī annū
ī fine dictox q̃nq ānox 7 diex 7 o pueniat ī libris 7 o q remanē
ꝓponūt in fine dēi ōnium. q̃d sic erit uidend. Q ꝛa ī illis 7 o dieb⁹
de 180 fiūt 187 pone $\frac{180}{187}$ ān q̃s ꝑ q̃nq ānis pone q̃nq̃es
$\frac{5}{6}$ ī hūc modū $\frac{5}{6}\ \frac{5}{6}\ \frac{5}{6}\ \frac{5}{6}\ \frac{5}{6}\ \frac{180}{187}$ mlca 4 ꝑ 4 q̃s
4 que ꝑ 4 que ꝑ 4 que ꝑ 180 que sic sup⁹ ingul q
ꝑ libr 7 o 7 sūmā que euenit diuide ꝑ $\frac{1}{6}\ \frac{0}{6}\ \frac{0}{6}\ \frac{0}{6}\ \frac{0}{6}\ \frac{0}{187}$ exibūt
$\frac{1}{6}\ \frac{7}{6}\ \frac{14}{6}\ \frac{5}{11}\ \frac{13}{17}$ 7 7 tanta erit illa quātitas. Q uē nūm erunt de
$\frac{1}{7}\ \frac{7}{6}\ \frac{0}{6}\ \frac{1}{11}\ \frac{12}{17}$ 99 remanēt $\frac{5}{6}\ \frac{1}{6}\ \frac{6}{11}\ \frac{16}{17}$ 91 et hoc ē illa q̃ntitas
cū qua 7 cū ei⁹ usuris ꝓsolut⁹ pensio. et nichil iñ ī fine remanet. q
fco. pone ut pensio sit 7 6 ut supi⁹ fecim⁹. et unde cū pensio fuit
7 6 q̃ntū erit capitale cū quo possit tenē domū p̃ceptus annis
4 7 dieb⁹ 7 o erūtq $\frac{1}{6}\ \frac{7}{11}\ \frac{6}{17}$ 110 q cū uellēt ee $\frac{5}{6}\ \frac{1}{6}\ \frac{6}{11}\ \frac{16}{17}$ 91
mlcabis $\frac{5}{6}\ \frac{1}{6}\ \frac{6}{11}\ \frac{16}{17}$ 91 ꝑ 7 6 7 diuide ꝑ $\frac{1}{6}\ \frac{7}{11}\ \frac{6}{17}$ 110 exibē
libr 7 o ꝑ q̃sita pensione ut in tcia ꝓcedenti q̃stione demōstrauim⁹.

Alīa do mo

Iterū pensio sit libr ℥ o ⁊ q̄di ꝓstamus sī eāde domū ad eadē ulu
ual tantū q̄ uenit domū āuis 4 ⁊ dieb⁹ 7 o ⁊ sī fine huī ei uenā
sit capitale. q̄ de ōib⁹ 4 q̄s ipe hūit i suo capitali sacere
ꝑ sīgulū āuū. ℊ in oīb⁹ 4 lucrū 1 ℊ i q̄libet ℥ o. sī 1 4 o
lucrū ℥ o unde pensionē. ⁊ tm hūit ipe. Iterū si lucrū uarie de
mo i āuū ꝓuenīet. alia ītigere regula unde hoc ut ꝓmū ꝑ dieb⁹ 7 o
i q̄b⁹ de 1 8 o fiūt 1 8 7 ꝓnat 180/187 Iterū sm ipsū ponat i
ordine q̄libet 5/6 sūt sup̄ diuisū. Iterū mleabus 4 ꝑ 4 que ꝑ
4 que ꝑ 4 q̄ ꝑ 4 que ꝑ 1 8 o que sūt sī ungul. et sū
mā que euenerūt extrahet et mleatōne oīū mūor q̄ sē sb ugul ⁊ sūt
mā q̄ remanserūt. diuidet ꝑ mleatōnē de 5/6 1/6 16/11 17/11 i mūo q̄ en
que et mleatone oīū mūor existentiū sub ugul i scripsit. ⁊ sūt habus
libr 1 4 o

pensio ℥ o

Alīa de domo

Iterū capitale sit 1 4 o ⁊ lucrū sit ut sup̄ ⁊ q̄uis pensiones q̄ntur.
cū tm q̄libet suū capitale ei i fine decem āuor ꝓnat remanē ⁊ sēp 1/4
sūm capitale ipe lucret. accē q̄ntū de 1 4 o q̄ē ℥ o ⁊ hoc ea ꝑ q̄
sua pensione

lus ꝓtime 1 4 o

pensio ℥ o

Alīa de eadem domo

Iterū lucrū sit idē. ⁊ pensio sit eadē. sī fine decem āuor ⁊ diez 7 o
libr ℥ 6 ulē suū capitale ei remānisse ꝓximū. ꝓmū q̄dē incipiendo
sē sūt ℔ 1 4 o cū quib⁹ lucrat pensionē. quib⁹ repto unde ex quo ca
pitali ℔ ℥ 6 lucrari possit deserīamus in ordine 180/187 5/6 5/6 5/6 5/6 5/6
⁊ mleent oīa nūi qui sē sūt ugul erūt 4 6 ℥ 4 0 0 que extrahe
de mleatōne oīū mūor qui sē sb ugul unde ℔ 1 4 1 1 ℥ rema
nēt ℥ 9 1 6 1 ℥ i quor regula diuide mleatōnē de 4 6 ℥ 4 0 0
i ℥ 9 que debēt sup̄are sī suū capitale. erūt ℔ 17 6 ℥ 6 / ℥ 1 4 7 6 7 ℥ ℥
q̄ adde cū 1 4 o erūt 17 6 ℥ 6 / ℥ 1 4 7 6 7 17 ℥ ⁊ tm hūit ipe

Capitalis prestitus 17 6 ℥ 6 / ℥ 1 4 7 6 7 17 ℥

Iterū ponat q capitale ipi sit ℥ 1 4 7 6 ℥ 6 / 7 17 ℥ ⁊ lucrū sit idē. sī fine
lucret libr ℥ 6 ⁊ q̄ta sit pensio ignoret. sciat q̄dē q ⁊ in doce
mo ipm 17 6 ℥ 6 / ℥ 1 4 7 6 7 ℥ ℥ cū q̄b⁹ lucrat i illis 4 āuis ⁊ dieb⁹ 7 o
illat libr ℥ 6 q̄ i fine ei ꝓponīt ulē suū capitale remanē. q̄ ertra
hat de 17 6 ℥ 6 / ℥ 1 4 7 6 7 17 ℥ remanēt 1 4 o de q̄b⁹ accipiat q̄ta ꝑ
tio q. p singulū āuū q̄ntū sui capitali lucrari ꝓpōit erūt ℥ o ꝑ
q̄stū pensione.

pensio ℥ o

De milite recepto ꝑ suo feudo bīz. o c c.

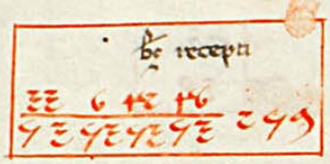
Quidam miles erat receptus a quodā rege ei sua feudi i unoquoq
āno bīz ℥ o o ⁊ psoluebant ei i. uig. pugil. ⁊ i una quaq accipie
bat bīz 7 4 hec ē paga de tbz mēsib⁹ q. cū necessitate cogeret ro
gauit quēdā duīt ut q modata ℔ tot bīz ad usum. p quib⁹ ille
ipe diuel acceper illos bīz ℥ o o exputādo bīz 7 4 unicui
usq paga. de paga uidet ℔ paga de capitali ⁊ pficuo. q. accepisset

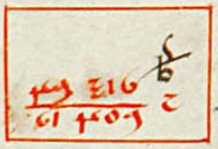
uolūmen ipi ꝑstauit ei ꝓ bȳ ad ꝑfectū duo ꝙ bȳ ꝙ centenariū i uno quaꝙ mēse. Querit quot bȳ ꝓ ꝑstantia acceꝑit. Primū quidē studeat hāc cōnē ad uiagio regulam redigē. q̄ sic redigit. q̄ i uno quaꝙ mēse luerū 100 bȳ ē bȳ 2 g̃ huc centenarij ē bȳ 6 i trib⁹ mēsib⁹ s. i trimo uniuscuiꝙ ꝓuge. g̃ i unaquaꝙ puga de bȳ 100 fuē 106 hoc ē de 40 fuer 47 et qꝙ puge sē. iij. iij. uiagio fuit udmē gerē 7 qꝙ puga ē bȳ 7 4 hanc ipi ꝙ extendio uniuscuiꝙ uiagij. dein q̄ de 40 fuē 47 pone $\frac{40}{47}$ quo ꝙ. iij. pagis sic $\frac{40}{47}\ \frac{40}{47}\ \frac{40}{47}\ \frac{40}{47}$ et mlca 40 q̄ sē sē ꝑma uga ꝙ 47 que sē sb sa. que ꝙ 47 q̄ sē sub tcia q̄ ꝙ 47 q̄ sē sb q̄rta erē 7 1ᶜ 1ᵉ 2 8 40 ꝓ mlca eāde 40 ꝙ 40 sede unge q̄ ꝙ 47 tcie que ꝙ 47 q̄rte erē 70 2 2 400 ꝓ mlca ꝑmā 40 ꝙ si q̄ ꝙ tcia erē 12 4000 q̄ ꝙ 47 q̄ sē sb q̄rta uga. erūt 6 6 2 4000 ꝓ ursū mlca 40 ꝙ 40 que ꝙ 40 que ꝙ 40 .s. ea que sē sē uga erē 6 2 400000 q̄ adde ē rehō trib⁹ mēsib⁹ ꝓ ducentis mūs. erē 2 7 2 1ᶜ 1 2 40 q̄ mlca ꝙ 7 4 erē 2 0 4 0 6 0 1 2 40 que dunde ꝙ $\frac{1}{47}\ \frac{0}{47}\ \frac{0}{47}\ \frac{0}{47}$ eribunt $\frac{22}{47}\ \frac{6}{47}\ \frac{12}{47}\ \frac{16}{47}$ 2 47 tot fuerē bȳathȳ q̄s acceꝑit i ꝑstantia. q̄ uidā uolens q̄struere palatiū

De illo qui hedificauit pala

ꝓpe magīm eī quo fec̄ quentōnē de lepē bȳ. i mense. expleto q̄dē mense debebat ē ꝑsolut⁹. Predict⁹ magr erat pauper⁹ stephanus illi⁹ opis ut mutuū sibi bȳ 11 ꝙ suū nēcss. q̄ ꝓdict⁹ libenē. sz tali cōe qꝙ de 60 redd⁹ 61 i mēse ꝙ qꝙ acciꝺ de 11 bȳathȳs. i fine mensis erūt sibi ꝑtī. s. bȳ 7 et q̄ remāserit mutuabit ei eadē ipm. dñs laudabilis religs magr ū ꝑfess⁹ fuit. q. dñs asserit 7 laborauit op⁹ duob⁹ mēsib⁹. Querit q̄tū dñs opis debebat habere ꝑ tēpo magistro. h regla ꝑm regulā ꝑme dom ē operādi. uidelz ut sīpoñ unū ill uni⁹ mensis illoꝝ 11 bȳoꝝ si ꝓ erūt $\frac{11}{60}$ 11 de q̄b⁹ dēpt bȳ 7 .s. ꝑtī illi⁹ de uno mēse rēanō bȳ $\frac{11}{60}$ 1ᵉ quib⁹ erūt de 11 remanēt $\frac{11}{60}$ 6 q̄ fuit minuto accipiat ꝑmū mēsis q̄ mlca ꝙ 61 7 dunde ꝙ 60 ō q. de 60 fuē 61 eribē bȳ $\frac{1\ 0\ 2\ 2}{6\ 6\ 10\ 10}$ qui sē minuto ledi mēsis. ꝙ quib⁹ habuerat dunde mlcatōnē bȳathȳs $\frac{11}{60}$ i 2 0 uidelz i dieb⁹ mēsis eribē diel $\frac{22\ 12\ 12}{61\ 12\ 05}$ 18 ꝙ quib⁹ i uno mense expleuit op⁹ q. debebat magīs ipe. ꝙ ipse bȳ 11 opus. q̄s erūt mēse ipi de duob⁹ mēsib⁹ remanēt diel $\frac{12\ 2\ 16}{61\ 12\ 05}$ 11 de quib⁹ ipe magr receꝑt erat suū ꝑtī. q. ꝙ illi⁹ dieb⁹ ei ꝓfuit. q. si repme uolūt. mlca ipse diel $\frac{12\ 2\ 16}{61\ 12\ 05}$ 11 ꝙ ꝑtī mēsis. s. ꝙ 7 dunde ꝙ 2 0 .s. ꝙ diel mensis eribē bȳ $\frac{12\ 2\ 16}{61\ 12\ 05}$ 2 7 tantū erat ille receptus i illis duob⁹ mēsib⁹ uic illoꝝ 11 bȳoꝝ q̄s ꝑmū hūerat. Deedem

Si dicat⁹ q. ipe magr laborauit ſſ 11 bȳ tm q. dñs opis erat ei datur⁹





bi̅ ꝛ mlca ꝑ ꝛ ꝑ dies ꝛ 0 erũ 1ꝛ 0 que dnde ꝑ 7 erib̅ dies $\frac{1}{7}$ 17 quos adde cũ mẽse 1 7 dieb̃ $\frac{ꝛꝛ}{61}$ $\frac{ꝛꝛ}{ꝓ03}$ 18 erũ dies $\frac{1}{7}$ $\frac{60}{61}$ $\frac{102}{ꝓ03}$ 64 7 tm̃ laborũ tp̃e

Dies		
1	60	102
7	61	ꝓ03

64

De duob: hominib; q. huiusmõi societatẽ cõstituũt Constantinopl'

Duo hoĩes ꝓuẽ i ꝯstantinopoli hñuerũt ĩnĩml societatẽ quor unꝰ ꝓrexit alexandriã negotiandi cũ 7 ulit secũ de cõi hereditate q̃tũ libuit steteꝝ ibi ãnis 4 7 dieb̃ 70 et lucrabat q̃tũ sui capitis i uno quoq; ãno septimã sui capitis 7 tm̃ expendebat bi̅s ꝛ 7 ĵ sine ad deos 4 ãnos et 70 dies cũ socijs ei finitis reiꝰ nil ei remanebat. 7 socij ei lucrũ suũ i suo tẽo q̃tũ a ꝑncipio socio suo remanserat. Q̃re tm̃ quãtũ unusq̃sq; hñt de eoꝝ hereditate cõi. Jn hac q̃stione due mãgnor regule ꝑ dom̃ ꝑparent posse ĩtelligi. ꝓma quidẽ de ip̃o qui ꝯstantinopoli remãserat. cũ i unoq̃q; ãno septimã sui capitis lucrarer. talis ẽ ac sũ dr̃ q̃ de 7 faciebat 8 ꝑ 4 cũ ãnis 7 dieb̃ 70 unagij 4 et $\frac{70}{ꝛ60}$ unꝰ unagij ĩtelr. Et expendiũ unꝰ cuiq; ãni q̃ faciebat sibi 7 ẽ tm̃ q̃ si dr̃et q̃ i uno quoq; unagio ip̃e expenderij. q̃ in uno quoq; ãno erogabat ip̃e ꝑ ꝑsone dom̃. 7 cũ ei nil remãsisse ꝓ nr̃a ꝛpiendo ẽ ꝑ reglam dom̃ ~~dom~~ ab illis 70 dieb̃ indeꝯ ne inueĩret de q̃uo capitali potuit faciẽ expendiũ q̃ in illis 70 dieb̃ fecerat q̃ sic iueãre ꝑ reglam dom̃ ꝯcessum. s. q̃ cũ i ãno de 7 faciẽ 8 q̃ i dieb̃ 70 de 7 faciẽ $\frac{7}{ꝛ0}$ 7 unꝰ bizãcij cũ ip̃o ~~dnde~~ 70 dies fiũt $\frac{7}{ꝛ6}$ unꝰ ãni. q̃ de ꝛ4ꝛ faciẽ ꝛ49 hoc ẽ q̃ de ꝛ6 faciẽ ꝛ7 Q̃re deb̃ uendi fi $\frac{ꝛ6}{ꝛ7}$ dem̃ uideãt q̃m̃ expendiũ accidat illis dieb̃ 70 aslem ẽ expendiũ ãnis. ꝛ7 ꝑ dies 70 7 dnde ꝑ ꝛ60 erib̃ bizãtẽ $\frac{ꝛ1}{ꝓ9}$ 7 et tm̃ ẽ expendiũ 70 dies q̃ mlca ꝑ ꝛ6 que fi q̃ ꝛ7 7 dnde ꝑ m̃ ꝛ7 erib̃ bizãtẽ 7 7 tm̃ hñt ip̃e ꝑ mortẽ q̃ nor. deiñ q̃ ãno i ãnũ usq; q̃ ad cap̃ ꝓmi ãni deficiet socius i dom̃ regla socij. ꝑ audeat oppi. indeꝯ ne ẽ expensi in septẽ bizãtijs a dñs expendiũ q̃m ãnis. ꝛ7 erũ ꝓ ꝓ que mlca ꝑ 7 et dnde ꝑ 8 idem q̃ de 7 faciẽ 8 erib̃ $\frac{1}{ꝛ}$ ꝛ8 7 tm̃ remãsisset ei ẽ ũ. unꝰ ãnis mẽ ãni. si q̃s adde expendiũ q̃m ãni. s. ꝛ7 erũ bi̅s $\frac{1}{ꝛ}$ 74 q̃ mlca ꝑ 7 7 dnde ꝑ 8 erib̃ bi̅s $\frac{10}{ꝛ8}$ 667 tm̃ remãsisse ei ꝑ dẽnũ cũ quib̃ adde expendiũ ter ãni. indeꝯ ꝛ7 erũ $\frac{10}{ꝛ8}$ 102 q̃ mlca ꝑ 7 7 dnde ꝑ 8 erib̃ bi̅s. $\frac{1ꝛ1}{ꝛ88}$ 90 7 tm̃ remãsisse ei ꝑ bizãtiũ ẽ quib̃ additis bi̅s. ꝛ7 q̃s expenderet i ꝛo ãno erũ $\frac{1ꝛ1}{ꝛ888}$ 1ꝛ9 q̃ mlca ꝑ 7 erib̃ bi̅s $\frac{10ꝛꝛ}{ꝛ888}$ 111 7 hoc ẽ q̃ remãsisset ei ꝑ expendiũ ꝓmi ẽ quib̃ additis bi̅s ꝛ7 s. ip̃i ãni expendiũ erũt bi̅s $\frac{10ꝛꝛ}{ꝛ888}$ 1ꝛ8 q̃ mlca ꝑ 7 7 dnde ꝑ 8 que mlcatio fit ꝑ mabet ũgã sub q̃ fiũt ꝛ et 8 et 8 et 8 ficta fr̃ sb ũgã nũ quẽ mlcatre uis ꝑ 7 sub qua 7 er parte dr̃ ponet. 8 .s. d uisorũ 7 mlcatis ꝑ 7 ꝑ 1

ꝛ7 tm̃ expẽdebat ꝑ annũ 8. ꝛ4 Ali q remãsiũ cõstãtinopoli lucrabat ãno quoq; anno.

er dnde ꝑ 8.

qē ſſ̄ 7 erſ̄ 7 q̄ diuidet p eādē 2 eribī 2 7 rēmet 1 pōe remanēt
1 ſſ̄ 2 et 2 fiūt ī mūu 7 mlēa 7 p 0 qē ſſ̄ 8 uēiet 0 q addo
eī 2 fiuntſ erſ̄ 2 que diuidet p 8 q̄ mē diuſores octonarioſ ē
p̄m diuſor eribit 2 remēt 2 pone 2 ſſ̄ ipa 8 et mlēa 7 p 2
que ſſ̄ ſſ̄ fm octonariū erſ̄ 1 q̄ quīb diuiſ p eādē 8 erūt 1 et
remanēt 6 pone 6 ſſ̄ 8 q̄ mē diuſores octonarioſ ē ſeōſ et re
fiūt 1 et mlēa 7 p 2 q̄ ſſ̄ ſſ̄ 8 ī ultīo ūge erſ̄ 1 eī q̄b addo
unū fiuntū erſ̄ 1 4 que diuide p penultima 8 ūge fiunt eribū
1 7 rēmēt 7 pone 7 ſſ̄ ipa 8 et fiūt 1 q addo mlēaōē
de 7 ī 1 8 erūt 10 2 7 que diuide p 8 que ſſ̄ ultima ſub ū
gu primā eribī bīſ $\frac{1\ 2\ 6\ 7\ 5}{2\ 8\ 8\ 8\ 8}$ 12 9 7 ſm hūit de cōi hentica ipe q
cōſtātinopolī remāſerūt. deīn accedēd ē ad eū q alexandrīā pretent
q ſm magiōr ul nom regulā oportet opari. ſ. p eī īqui ꝑtent de
ipō qui tenuerūt dominū ānis 4 7 dieb 7 0 7 ſſ̄ ipi capitale lucē
fuit ī finē bīſ $\frac{1\ 2\ 6\ 7\ 5}{2\ 8\ 8\ 8\ 8}$ 12 9 undeh̄ cog q remanſerūt ei q cōſtā
tinopolī pmāſerat que ſic ſupi ē opūnda demōſtrationē undeh̄ ut p
mīa uidet de quāntſ bīſāthiſ pōt ēm pficuū hīre uīn posſit de
pficuo facē expendiū. 7 ipi ī finē ū gmmuant qui ſic iuēiet dece
pe bīſ 2 4 qui ſſ̄ expendiū et mlēa eoſ p 4 ꝑdeo q iuenīebāt
$\frac{1}{4}$ ſui capitat erſ̄ 12 4 de quoꝝ lucro potest fiēē expendiū
7 mlēa eoſ p 7 ſi fine nō cōmunent. deīn q de 4 fiē 6 ſeruīē
de ſſ̄ $\frac{5}{6}$ q̄libet ꝑ ānos 4 ſic $\frac{5}{6}\ \frac{5}{6}\ \frac{5}{6}\ \frac{5}{6}\ \frac{5}{6}$ 4 urſū q̄m ī uno
quoq ānno de 4 fiē 6 g ī diebꝫ 7 0 de 4 fiēt $\frac{7}{12}$ 4 hoc
ē q de 180 fiē 187 q̄r ponenda ſſ̄ 180 ſſ̄ 187 et ꝓſ
eribenda ī ordīe eī alīſ $\frac{5}{6}$ ſic $\frac{180}{187}\ \frac{5}{6}\ \frac{5}{6}\ \frac{5}{6}\ \frac{5}{6}\ \frac{5}{6}$ deīn mlēa oīū
nūoꝝ qui ſſ̄ ſſ̄ ūgul erſ̄ 4 6 2 4 0 0 que hāut loco capitalīſ q
erūnhe et mlēatōē nūoꝝ qui ſſ̄ ſub ūgul q ē 1 4 4 1 1 2 q hūt
loco capitat 7 luc. remanēt 8 9 7 6 12 p luc ī quoꝝ regīſ dimi
de mlēatōnē de 4 6 2 4 ī $\frac{1\ 2\ 6\ 7\ 5}{2\ 8\ 8\ 8\ 8}$ 12 9 .ſ. ī capitale ipi q
ſtātinopolī remāſerūt. eribī bīſāti $\frac{1\ 71\ 4\ 0\ 2\ 1\ 6\ 3}{2\ 8\ 8\ 8\ 8\ 2\ 4\ 7\ 67}$ 81 q ſſ̄ bīſ
ē quibꝫ ipe absq̄ expendio lucrū fuīt bīſ qui remanſerūt qui cō
ſtātinopolī remāſerūt. eī q̄b addē q diuide p penultima ūge
fiunt eribūt 7 remanēt pōe ſſ̄ ipi 7 fiūt 12 4
eī q̄bꝫ totū expendiū lucrabāt erſ̄ bīſ $\frac{1\ 71\ 4\ 0\ 2\ 1\ 6\ 3}{2\ 8\ 8\ 8\ 8\ 2\ 4\ 7\ 67}$ 206 eīdē
pōtuīt de cōi hentica ipe q ī alexandrīā pretent.

bīſ illī q uīt adleūidaī

$\frac{1\ 71\ 4\ 0\ 2\ 1\ 6\ 3\ 206}{2\ 8\ 8\ 8\ 8\ 2\ 4\ 7\ 67}$

Incip pars viii. d regīſ ermanaſ d duob hoīb q d tuleī lanā ad naulum

ida duxit ī quadā naue lme fuſcel 12 equah ꝓtio ad naulū et
alī fuſcel 17 eīdē ꝓtiſ. eī neīſſet ad locū ī quo debebat descendere.
naucler petiuo eis naulū gratuitū. q eī ſi hūerūt dſcl ſm naulū ꝓpo

nerēt. dnūt ei p̄mū. Accepe unū de mel⁹ ⁊ feib⁹ p̄ naulo meo⁹ 1 ℥ fal
eū ⁊ reddac in fistuū. Qz eū accepiss reddit sol 10 p̄ hoc q̄ faleat na
lebat plus naul eo⁹ 1 ℥ faleū. Cū ar⁹ gēt naulū alij hoī de fala
b⁹ 17 accepit unū faleū ab ipo. ⁊ reddidit ei sol ℥ Qz eū q̄t na
lebat faleū. ⁊ q̄t p̄ unoquoq⁹ falee naulū dabat. Accepe dissūm q̄ ē a
faleib⁹ 1 ℥ usq; 1 faleet 17 que ē r⁹ Hēc accepe ullū q̄ ē mū
sol 10 et sol ℥ q̄ ē sol 7 g̃ p̄ faleib⁹ r⁹ q̄ vñ hūit ap̄li
ano fuit ei reddit mūt sol 7 q̄i cuidēt lime ut q̄ naueleri p̄
ipm r⁹ faleib⁹ retinuit sol 7 g̃ de oīb⁹ mj. faleib⁹ dabat nau
lū ℔ 7 g̃ fi ℔ 7 qui sē dī 8 r⁹ diuderūt p̄ faleet r⁹ cribi
dīj 21 p̄ naulo unī cuiq; faleet. g̃ de faleib⁹ 17 erat datur ille q̄
eet diuersat p̄ naulo dī 17 uicet 21 qui sē sol 22 7 dī 9 q̄b⁹
fr̄ddidit ℔ 10 q̄t naueleri ei reddidit erāt sol 22 7 dī 9 7 tūtū
uiuit unūq; faleū. Et h accepit naulū de faleib⁹ 17 alij hoīt q̄
2 sol 29 7 dīj 9 q̄ exijt et mlcatōe dric⁹ 21 ī 17 7 sup
addiderūt sol ℥ q̄t naueleri ei reddidit ad eolāe sol ℥ 7 dīlos
9 denūciet. De mercatore deferēte lapide p̄ paolos constāntinopolim

Mercator q̄dā deferēt lapidē p̄ paolos. q. eq̄li p̄tio ī cōstāntinopoli ad uē
dend erat p̄mo tūsitur p̄ gintia. 2 cū ad p̄mū deuenīt gintiū. et
amicta remisit ē ei totū gintiū accipient earū q̄ de uno lapide
gintiū ñ erigēt ī so 7 tcio gintiū. q̄ cū ad fm uenīt gintiū. 9 merca
r⁹ abstulit et r⁹ lapidē unū restituit ei bīz 100 ad deū cū
uenīt gintiū gintiū⁹ abstulit et de reliq⁹ unū 7 restituit ei bīz
140 Qz rit quot malebat unūq; lapis 7 q̄t dabat p̄ gintio de uno
quoq; lapide. hoc q̄ dī de p̄mo gintio ñ dī ñ p̄ dertibi ut ipēdiant tu
dēs de duob⁹ aliis gintijs ē hēnt de naueleno q̄ erat receptū ñ nu
lū de mj. lapidib⁹ 7 ill⁹ q̄i remanēt 7 de r⁹ remanēt 1 īq̄
diuidēt 40 q̄ ē dissūa que ē 100 usq; ī 140 cribi 40 et
tot dabat gintiū de uno quoq; lapide que mlcat p̄ lapidē r⁹ erit
bīz 100 qui addant cū bīz 100 q̄ reddit fuerit ī so gintio erit
bīz 200 7 tūc ualuit unūq̄q; lapis. Et si mlcatūr erāt 40 p̄ la
pidē ℥ et fr̄addiderit bīz 140 ad eolāe b 200 p̄tiet
duob⁹ hoīb⁹

Qui hūit piscē 17 et alt piscē 17 et fuerūt oīs piscē unū p̄
tij. cōtigit⁹ ei abstulit p̄mo piscē 7 dīlos 17 p̄ diuersum. Et alio
abstulit piscē ℥ et reddidit ei dīlos 7 tūc gintiū 7 p̄tiū
unūcuiq; piscis. Qz a de 17 [illegible] p̄ diuersum piscis unī 7
dīj 17 g̃ de unoquoq; piscē dat 1/17 unī piscis 7 dī 1 Qz
sed so p̄ tredecī piscib⁹ debuit dare 13/17 unī piscis 7 dī 17 p̄ q̄b⁹

p̄tiū faleium
℔ d.
℥ 9

dedit pisces 12 minus dr 7 fiet 12/12 unus pisces 7 dr 12 equantur duobus
piscibus minus dr 7 Et si emit addantur dr 7 erunt quod duo pisces erunt 12/12
unus pisces 7 dr 12 et quibus si emit auferuntur 12/12 pisces remanebit 11/12
unus pisces que equantur dr 12 hoc est quod 11/12 pisces valet dr 12 pro
portionaliter igitur fiet 11 ad 12 ita 12 ad pretium pisces. Et per 11 diuides
mlcationem de 12 in 12 erit 2/11 12 per primo unus pisces cum 1/12 et
2/11 1 adde cum uno dr erunt 2/11 12 qui fit communis unicuique pisces. Vbi igitur
communis pisces 12 et dr 2/11 22 qui pretium et ducis 2/11 2 in 12 qui
equatur primo unus pisces 7 dr 12 Sibi communis de piscibus 12 et dr 7/11 26
qui equatur primo duo pisces minus dr 7 ut oportet Si et proponatur quod
et 12 piscibus communis tolleris pisces 7 redderis dr 12 et per piscibus
12 tolleris pisces 12 minus dr 7 erit hic questio insolubilis nisi certo
similem inuestigationem quod 12/12 unus pisces minus dr 12 equatur duobus pis-
cibus per minus dr 7 equatur duobus piscibus minus dr 12 que si emit addatur
dr 12 uelut quod unus pisces minus dr equatur duobus piscibus 7 dr 6 quod igno-
ratur Et si per 12 piscibus tolleretur pisces minus dr 7 et per 12 tolleretur
pisces 12 minus dr 12 et 12/12 unus pisces minus dr 7/12 7 equatur piscibus 12
minus dr 12 Et si emit addatur dr 12 et auferuntur 12/12 pisces rema-
nebit 11/12 unus pisces equalis de dr 5/12 12 Et mlca 5/12 12 per 12 7 diuide
per 11 erunt 2/11 12 per primo unicuique pisces. Et quod si minus de dr 7 quod
reddidit communi et cui abstulit pisces ut hec questio est insolubilis nisi com-
muni reddat et plus quod accepit ab eo. Et si proponatur quod finium quod fuit redi-
tus primo hoc erit ad finium quod fuit reditus sic sit pisces unus ad pisces al
teri hoc est sit 12 et ad 12 et unicuique piscis valeri fuerint dr 2/11 12
Vidi emit minuta 4 per 1 dr et inuenitur ita dr 10 7 reddit
illa minuta 7 per dr 1 7 lucrum fuit dr 11 ita illa 10 dr 12 quare quod
minuta fuerint illa que emit 7 que illa que uendidit sic fiet mlca 4 per 10
erunt 40 deinde pone 4 sit 40 sit 4/40 et tot illa fuerint minuta illa que
emit per uno dr Et per 10 dr 12 emit 40/40 hoc est tot per unum quod
uendidit tot illa minuta. Vnum habet et ipse dr 12 et 10 quod fuerint
uenit eo 11 quod fuit sit lucrum. quod mlca 7 per 12 1 erunt 14 7 sit quod pone
7 sit 7/14 7 illa fuerint minuta illa que uendidit | De illo quod mi-
nus in mundano per promissa colligendis
quo erunt pome 7 7 accepit ab hiima quibus pomoy. qui ei quod
ter et per optauit ei dare primo hostiario medietatem ei pomoy 7 unum
amplius. Et ei ita dare cuique 4 hostiarius per ei unum pomum Et
quot fuerint poma illa que de pomario collegerat sic faciet per unum pomum et
ei remanserunt unum 1 sit per addes unum pomum et illi hostiario dederat
erunt 2 et duplica erunt 4 7 illi huic ei ad unum deneris hostia-

So ostiario medietatem residuoy pomoy et unum amplius

121

rium sunt que adde illud pomum quod dedit sexto hostiario erunt 4 que duplica
erunt 10 et tantum remansit ei post exitum 4 [illegible] sunt que adde unum po-
mum quinto hostiario erunt 11 que duplica erunt 22 sunt que adde 1 pro
illo pomo quod dedit quarto hostiario erunt 23 que duplica erunt 46 super
que adde 1 pro illo pomo quod dedit tercio hostiario erunt 47 que ~~[illegible]~~
duplica erunt 94 sunt que adde 1 pro eo pomo quod dedit secundo hostiario
erunt 95 que duplica erunt 190 cui superadde 1 quod dedit prime porte et
duplica summa erunt 382 et tot fuerunt illa poma. et sic relinquendo sunt quod
[illegible] quantum [illegible] poteris quantum [illegible] reperire.

Ille pone ipsum collegisse a principio [illegible] de qua dedit prime quarte porte $\frac{1}{2}$
et pomum 1 remansit ergo $\frac{1}{2}$ rei minus 1 de quo sexte porte dedit medietatem
et pomum unum ergo remansit ei quarta rei minus pomo $\frac{1}{2}$ 1 de quo dedit
tercie porte [illegible] et pomum 1 [illegible] remansit ei $\frac{1}{8}$ rei minus pomo
$\frac{3}{4}$ 1 cuius medietatem dedit quarte porte pomo 1 addito [illegible] remansit
ei $\frac{1}{16}$ rei minus pomo $\frac{7}{8}$ 1 cuius medietatem uno pomo addito cum [illegible]
[illegible] quinte porte remansit ei $\frac{1}{32}$ rei minus pomo $\frac{15}{16}$ 1 cuius medietatem cum de-
dissent pomo 1 addito sexte porte remansit ei $\frac{1}{64}$ rei minus pomo $\frac{31}{32}$ 1
ex quo [illegible] cum dedissent septime porte medietatem pomo 1 addito remansit ei
$\frac{1}{128}$ rei minus pomo $\frac{63}{64}$ 1 que equantur uni pomo [illegible] quod remansit
post exitum septem portarum [illegible] addatur pomum $\frac{63}{64}$ 1 [illegible] quod $\frac{1}{128}$ rei equantur
pomis $\frac{63}{64}$ 2 Quare multiplica $\frac{63}{64}$ 2 per 128 erunt [illegible] poma 382 nutis

Si propositum fuerit commiscere 2 integra cum De integrorum commistione cum mi-
nimis tribus ut dicamus cum $\frac{3}{4}$ et fiant 4 ita commixta hoc est 2
et 3 faciunt 4 deinde multiplicentur 4 per 4 et faciunt 24 et quantum de
istis 24 quod fiant sic facies describe $\frac{3}{4}$ 2 bis tamquam ad invicem ea de-
beas multiplicare deinde multiplica 2 integra per 2 integra erunt integra 4 que
fuerunt postea multiplica 2 integra que sunt in superiori linea per 3 que sunt 4 de in-
feriori erunt $\frac{6}{4}$ et econverso multiplica 2 integra inferiora per 3 que sunt 4 de
superiori erunt similiter $\frac{6}{4}$ quibus insimul additis faciunt $\frac{12}{4}$ Post hec multiplica $\frac{3}{4}$
per $\frac{3}{4}$ faciunt $\frac{9}{24}$ et talia erant illa 24 hoc est quod [illegible] integra et
12 eorum sunt quinte reliqua 9 sunt vigesime quinte que si insimul coadunaveris
faciendo integra de minutis [illegible] in summam multiplicationis de $\frac{3}{4}$ 2 in $\frac{3}{4}$ 2
[illegible] si $\frac{3}{4}$ 2 per $\frac{3}{4}$ 2 multiplicaveris faciunt $\frac{19}{24}$ 6 et si coadunaveris
4 integra cum $\frac{12}{4}$ erunt $\frac{2}{4}$ 6 quibus si [illegible] $\frac{9}{24}$ faciunt $\frac{19}{24}$ 6
[illegible] si [illegible] quod additis 2 integris cum $\frac{2}{4}$ $\frac{3}{4}$ faciant 7 et ad-
ditis 4 cum $\frac{8}{9}$ $\frac{6}{7}$ faciant 19 et multiplicentur 7 per 19 que faciunt 133
et quantum de illis 133 quod [illegible] describes ita per $\frac{2}{4}$ $\frac{3}{4}$ 2 et $\frac{8}{9}$ $\frac{6}{7}$ 4 tamquam
ea ad invicem debeas multiplicare [illegible] multiplicationem ab integris [illegible] multiplica 2 per 4
faciunt 10 que sunt integra deinde multiplica 2 per $\frac{6}{7}$ erunt $\frac{12}{7}$ quas [illegible] et 4

integri
4
Quinti
12
vigesimi quinti
9

$\frac{3}{4}$ 2

$\frac{3}{4}$ 2

integra mlca p $\frac{2}{4}$ erũt $\frac{14}{4}$ sunt mlca 2 integra p $\frac{8}{9}$ erũt $\frac{16}{9}$
et 4 p $\frac{2}{4}$ erũt $\frac{10}{4}$ et $\frac{2}{4}$ p $\frac{6}{7}$ erũt $\frac{18}{28}$ post h mlca $\frac{2}{4}$ p
$\frac{8}{9}$ erũt $\frac{24}{36}$ et $\frac{6}{7}$ p $\frac{2}{4}$ erũt $\frac{12}{14}$ Et adhuc $\frac{2}{4}$ p $\frac{8}{9}$ erũt
$\frac{16}{24}$ et nulla sũ illa 12 2 undecies 10 ꝑor sũ integra 7 12 cor sũ
septime et 14 sũ $\frac{\text{xx}}{4}$ et deincepl reliqua sũ sicuti supi in ineim.
que oĩa insimul uicta reddẽ 12 2 que si naturaliter addideris reuteris in
suma mlcatois de $\frac{2}{4}$ $\frac{2}{4}$ 2 ī $\frac{8}{9}$ $\frac{6}{7}$ 4 et sic er cor sibi studeas oper.
Vidi ad finẽ ueient. maiou filioꝝ ꝓcepit dicẽs. Subam mobile mee
inẽ uos sic diuidere. Tu bis unũ accipias. 7 septimã reliquoꝝ. altũ ũ
filioꝝ dis. Et tu bis 2 accipias. 7 septimã reliquoꝝ partẽ. altũ ũ
ut 2 bis accideret et $\frac{1}{7}$ reliquoꝝ ꝑtauit. Et sic uocauit ōs suos
filios ꝑ ordinẽ. dando unicuiq; ꝑpli unũ q̃ altũ. et deincepl sẽp. $\frac{1}{7}$ re
liquoꝝ. ultimo aũ hũit residuũ. Cõtingit aũ q; unicuiq; hũit de substã
tia patris eoꝝ equali ꝓdicta ꝑditione. Querit q̃r fuerũt filij. et q̃ntu fu
it ꝓcũa tpis. Jsta ẽ faciel ꝑ septimo q; dabat unicuiq; remanet 7
de quib er tuhr 1 remanẽt 6 et tot fuerũt filij eĩ. q̃ 6 ī se mlt
cata facient 2 6 et tot fuerũt bis illi. Et si ꝑmo filioꝝ hĩret $\frac{1}{7}$ sbe
pris 7 ꝑa bis 1 et sedet hĩret $\frac{1}{7}$ reliq 7 bis 2 7 hoc in ꝓcedẽt
in reliqs filijs addendo unicuiq ꝑ ordinẽ b 1 tũc filij eẽnt silr 6
et bis eẽnt septies 6 .s. 42 Et si ī maquaq; qstione ꝑmo hũisti
bis 2 ff 6 et reliq hĩent silr suos bisos ꝑ ascensionẽ ternarij. rẽ
filij eẽnt silr 6 et suma bisoꝝ eẽt triplũ dictaꝝ sumaꝝ. s. de 2 6
7 de 42
Et diuisi numm ī partes et ꝑme pti dedi unũ et $\frac{2}{11}$ residui. sc q̃
dẽ dedi 2 et $\frac{2}{11}$ residui. 7 sic addidi 1 unicuiq; parti. dat silr ei
$\frac{2}{11}$ residui et fuerũt partes equales. q̃rit q̃r fuerũt partes 7 q̃ fuit
suma. dunde 11 p 2 q̃ si si 11 nẽient $\frac{1}{2}$ 4 er quib tolle 1 re
manẽt $\frac{1}{2}$ 4 et tot fuerũt partes q̃ ismul mlcata erũt $\frac{1}{4}$ 20 ꝑ mũo di
uiso. Et si ꝑme dare 4 er mũl et se 8 7 reliqs dare ꝑ ordinẽ nu
meros ascẽdentes ꝑ 4 et suma eẽt 8 1 .s. quadruplũ de $\frac{1}{4}$ 20
Ita si ꝑme parti dare $\frac{2}{11}$ 7 de reliqs 1 7 cet ut sup partes filij eẽnt
$\frac{1}{2}$ 4 et suma eẽt $\frac{2}{4}$ 24 q̃ nient er $\frac{1}{2}$ 4 ī $\frac{1}{2}$ 4 et si mũl ꝑme
partis eẽt 4 se 10 et cet. mlca $\frac{2}{4}$ 24 ꝑ 4 et si loco de $\frac{2}{11}$ po
nerent $\frac{2}{11}$ diuides ꝑ 11 ꝑ 2 7 deincepl sic ut sup
Vrs diuisi numm dragmaꝝ ī partes et dedi ꝑme parti dragmas 2
et $\frac{6}{21}$ residui. se ũ parti dedi 2 plus .s. 4 et de residuo dedi
eidẽ $\frac{6}{21}$ tcie quidẽ dedi 2 plꝰ .s. 8 et deincepl ꝓcessi ī reliqs
partib eodẽ mõ ꝑ ordinẽ dando unicuiq; 2 plꝰ anteceditte pãte
et ꝑpli $\frac{6}{21}$ unicuiq; de residuo et fuerũt oĩ partes equales. queritur

24 2
6/21 2
1

augmenti ℓ. z milea p z 1 ℊ summa diuide p 6 que si sit z 1 erit
bz 1/2 1 ℊ duo gingiti uni ap parti.

Si p̃me parti debi z ℊ de residuo debi eide 4/13 ℊ ceteri nuoℓ p alee
ℊ me binary dat de residuo uni ap parti 4/13 pde 4/13 ex parte
oi augmto ℊ ei nuo p̃mo ℓ oi z et z se q z de z erit
ñ p̃dict ℓ p̃mi nichil de augmto. se remanet z de z remanet 1
q milea p 13 erit 13 q sua ℊ remanet 4 q si sit 13 de 13 remanet
nec 14 q milea p z erit 2 de q diuide p milesimone de 4 sic erit
bz 22/104 12 p nro diuisore p milea z ℓ augmti p 4 erit 10
i q diuide z z uenit 2/10 z p quarante partiti. si milea augme
ti p 14 erit z 8 q diuide p 4 erit 2/4 4 ℊ duo gingiti uni ap
parti. ℓ Cosi p̃mi anec 4/13 ℊ postea anec dicit nuoℓ p ex
dicto. se parties cibo eide ℊ milesimi augmenti p 13 erit z 8 que
diuide p 4 erit 2/4 ℊ est duo geigeri uni ap parti. Et milea 13
p z z ℊ diuide p z 4 ℊ habes summa nichil diuisi q est eadem ratio 12/104 17
regula eli erit quib si fuerint facies ut
p dixim. De tribus hoib: diuoℓ hmab:

Si tres hoies diuoℓ hmnt. et q3b si diuoℓ p diuoℓ si milesimi faci
ent aliq nam. si si diuoℓ si p diuoℓ tcij milesimi faciens duplu ei.
p tertiu si diuoℓ tcij p diuoℓ p̃mi milesimi faciens duplu ei. p tertiu si di
uoℓ tcij p diuoℓ p̃mi milesimi faciens duplu ei. p tertiu si de
duplu milesimi p̃mi i cir si. Quarto quor unusquisq hui. Quia mile
simo diuoℓ si i diuoℓ tcij sue duplu milesimi eide si et diuoℓ p̃mi scdo
manifestu est q tci hoi hz duplu p̃mi. sim q milesimo diuoℓ tcij hoi
et diuoℓ p̃mi sue tripli respectu milesimi eide p̃mi et p̃mi ex p̃mo tri
plo hoiem hz tplu si hoi qui repiat nichil et q repiant 1/2 1/2 .s. 6
et tertiu hui tci hoi. de quib accipe 1/2 q est z ℊ tertiu hui p̃mi.
et ex p̃mo acc 1/2 q est z ℊ tm habet tcij. Cui gen milesimo de z i
z sue 6 ℊ milesimo de z. i 6 sue 18 que si tripli milesimi p̃mi et p̃mo de 6
milesimi de 6 i z sue 18 que si tripli milesimi p̃mi et p̃mi de 6
Quidam emit starra frumenti 100 De homine qui emit 100 star frumenti

ℊ bz 100 ex q3b uendidit stari 40 ℊ bz alia 40 uendidit ad
tonu de 2/4 uni stare ℊ bz 1 q3e q3ti ex 100 starijs fuit
lucratus. Qui uendidit stari 40 ad tonu de star 1/4 1 sue ex tertia de
1/4 1 erit 4 ℊ de stari 40 sue q3ta erit z 00 q3s diuide p 4 ex
bus bz 40 ℊ tertia uendidit tpe illa staria 40 sue qui uendidit alia
stari 40 ad tonu de 2/4 uni stare ℊ bz facies q3ta de ill starijs 40
erit z 00 q3s diuide p z ex bz 2/2 6 6 ℊ tm uendidit alia. 40
sectaria. quib addunt cu bz 40 et cu pio illoz 40 starioz et bz

Adnatione d ff. 1/4 1

1 1
4/13 3
2

$\frac{2}{3}$ 106 et tantum vendidit totum fermentum ex quibus extractis bis 100
capitalis remanent pro ipsius lucro bis $\frac{2}{3}$ 6 [illegible] vendidit quinque 3 et
4 pro bis 1 divide 100 per $\frac{1}{3}$ $\frac{0}{4}$ [illegible] bis $\frac{2}{3}$ 6 [illegible]
regula pro multis aliis similibus [illegible].

Est numerus qui cum dividitur per 2 vel per 3 vel per 4 [illegible] per 4 [illegible] per 6 [illegible]
ex eo 1 indivisibile per 7 [illegible] integraliter dividitur [illegible] quod sit numerus ille [illegible]
[illegible] quod semper superat 1 cum dividetur per 2 vel per 3 vel per 4 vel per 4 vel per
6 [illegible] 1 de numero [illegible] residuum per unumquemque [illegible] integraliter
[illegible] numerum in quo reperiantur $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{6}$ [illegible] numerus ille 60 quem
divide per 7 superat 4 [illegible] 6 [illegible] per 7 divi-
ditur [illegible] numerus qui fuerit unum minus eo cum per 7 dividatur 6 [illegible] superare [illegible]
[illegible] 1 minus septenario [illegible] duplicetur 60 vel triplicetur vel [illegible] per aliud
quemlibet numerum donec multiplicatio ascendat in tale numerum [illegible]
qui cum dividatur per 7 remanent [illegible] 6 [illegible] 4 [illegible] 60
multiplicata [illegible] ex qua multiplicatione veniunt 300 [illegible] 1 [illegible] 301 et
[illegible] 420 [illegible] integraliter dividitur [illegible] addideris [illegible]
301 semel vel quotiens volueris [illegible] quod di-
videtur integraliter per 7 et per omnes reliquos cum divisus fuerit remanebit 1.

Per hanc [illegible] regulam [illegible] aliud numerum qui cum dividitur in quantitatibus numerorum [illegible]
[illegible] in decenarium semper superat 1 et per 11 dividitur integraliter quod
numerus est 24201 [illegible] 698377681 dividatur per aliquem numerum qui [illegible]
a 2 usque in 23 [illegible] 1 per 23 [illegible] dividitur in-
tegraliter qui numerus [illegible] regulam [illegible]

numerus
24201

numerus
698377681

De eodem

Item est numerus qui cum dividitur per 2 superat 1 per 3 superant 2 per 4 [illegible]
[illegible] 3 per 4 superant 4 per 6 superant per 4 per 7 [illegible]
[illegible] numerus in quo reperiantur $\frac{1}{6}$ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$ [illegible] 60 [illegible] 1
remanent 49 [illegible] per 7 [illegible] 60
[illegible] per aliquem aliud numerum [illegible]
[illegible] qui cum dividitur per 7 [illegible] 1 [illegible] 60 [illegible] 120
qui cum dividitur per 7 superat 1 [illegible] remanent 119 [illegible]
[illegible]

numerus
119

De eodem

Item est numerus qui cum dividitur per 2 superat 1 per 3 superant 2 per 4 superant
3 et sic deinceps [illegible] per 10 superant 9 per 11 [illegible]
[illegible] primum quidem reperias numerum [illegible] $\frac{1}{10}$ $\frac{1}{9}$ $\frac{1}{8}$ $\frac{1}{7}$ $\frac{1}{6}$ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$
quem sic reperire [illegible] 60 [illegible] in quo reperiuntur [illegible]
[illegible] $\frac{1}{10}$ $\frac{1}{6}$ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$ [illegible] per 7 [illegible] 420 [illegible]
[illegible] per 8 [illegible] 9 [illegible] 4 [illegible] 8
[illegible] per 3 [illegible] 9 [illegible] $\frac{1}{4}$ $\frac{1}{3}$ [illegible] 60 [illegible]
multiplicabis 420 per 2 remanent [illegible] 8 [illegible] 840 [illegible]

cum si addideris 420 semel vel
bis vel quotiens volueris habebis quod
[illegible] numerus

quod multiplicabis per 3 remanent ex regula de 9
erunt 2420

nūs ī quo reptūr oīs rupt ꝑscriptꝰ. 7 uocat in gometā mimꝰ cū
nūs nūor qui sr sub decenario. deīn ertuhr 1 de 7 470
remanēt 7 419 que cū diuidat integrāl ꝑ 1 1 hīs absq la-
bore nr̄m ꝓpositū. hoc ē q 7 419 ē q̄lr nūs slā cī r 6448411999
diuidr ꝑ aliq̄ nūm qui sit miōr de 7 7 sēp remanet 1 mīs ipo
nūo ꝑ quē diuidr 7 ꝑ 7 7 integrāl diuidr 6985577681

De duob; homūb; hītib; panes duulio ꝑ sup̄scriptos usq; ī 7 7 sēp sūc. 1 ꝑ 7 7 o u
.duudr.

Duo hoīes fuer quor ꝑmꝰ hūit panes 7 nūmales. 7 alr panes 7
a uer spatū ad quēdā fontē. q cū ꝑr ibi uēisset. sedert ut cōmede
ret. 7 ūsciunt quodā milite. ūuitauert eū. q descendit 7 cēdit ꝑr cī
eis. 7 cū oīs panes cōmedisset. miles discessit relīquēs eis biȝ 4 sue cu
rialitatis cā. Cr quib ꝑmꝰ accepit biȝos 7 sicut tres hūer panes.
alr ū sup̄sit relq̄s duos biȝos ꝑ suis duob ꝑūb. Q rr utrū diuisio
illa recta fuit ul nō. Q dā ū ipa recta fuisse asserr. cū unq̄sq
unū hūit biȝ ꝑ unoquoq pane. ꝙ hoc sīm ē. ro q ipi tres cōmederr
os q̄libq panes. Vñ gr̄gr unicuiq pār 7/2 1 gr miles panē 1/2 1
cōmedit. hoc ē 7/2 cr pūb illi q tres hūerut panes. Cr pūb ū alr
ꝙ cōmedit. ū tm̄ unī pānis. Q ē gr̄gr ꝑmo hoī biȝ 7 alteri
biȝ. De inuentione ꝑfectōr numerōr

Perfecte nūs ē cr q acceptis suis pūb qual ipe ī integrū hr facit
eū dē nūm ut 6 cui partes sr 1/2 1/3 1/6 7 alie partes ꝑr hal nō
hr ī integrū. Cr accepto 1/2 de 6 .s. 7 et 1/3 .s. 7 et 1/6
.s. 1 nimirū cadē faciut 6 q 6 ūcīūr fic. duplica 1 erūt
2 que duplica 4 errt 12 de quib tolle 1 remanēt 7 qui
nūs cū sit ꝑmꝰ hoc ē q ī hāt regl̄am. mlca ipm ꝑ dimidiū 3 sīs 12
7 sic hebis 6 Vñ si aliq̄ aliū ꝑfm nūm inuēire uoluīs. duplī
cabis tm̄ 12 errt 24 de quib tollet 1 rēmanebt 7 q nūs cū ī
hāt regulā. mlcabis eū ꝑ dimidiū de 24 unde ꝑ 12 errt 28 q
nūm ꝑfēt ē. q. suis collectis pūb eqpetat. Sartes ē ipi sr 1/28 1/14 1/7 1/4 1/2
Sutsū duplentis 28 faciut 56 de quib cū ertuhr 1 rēmēt
14 qui cū hāt regl̄am. duplicabis tm̄ 16 errt 32 de quib
tollet 1 remanebt 31 q nūs ē sit sīi regla. mlcabis eū ꝑ 16 7
hebis aliū ꝑfm nūm. s. 496 7 sic sēp faciendo poteris ī infinitū
ꝑfectos nūos repire Quot paria coniculoꝝ ī uno anno ex uno pāio gmi, nēnt

Quidā posuit unū par cuniculoꝝ ī quodā loco q erat undiq pariet
circūdatū. ut sciret qt ex eo paria gīminarēt ī uno āno. cū nati eox
sit ꝑ singlm mēsē aliud par gīminare. 7 ī 2o mēse ab eox natiui
tate gīminat. Q ī supsciptū par ī ꝑmo mēse gīminat. duplicabis
ipm. erūt paria duo ī uno mēse. Cr quib unū. s. ꝑmū ī 2o mense

geminat. ⁊ sic sunt in secundo mense paria 3 ex quibus in uno mense duo pregnantur
⁊ geminantur in tercio mense paria 2 coniclorum. ⁊ sic sunt paria 4 in ipso mense.
ex quibus in ipso pregnantur paria 3 ⁊ sunt in quarto mense paria 8 ex quibus
paria 4 geminantur alia paria 4 quibus additis cum pariis 8 faciunt
paria 13 in quinto mense. ex quibus paria 4 que geminata fuerunt in ipso
mense non concipiunt in ipso mense sed alia 8 paria pregnantur ⁊ sic sunt in sexto mense
paria 21 cum quibus additis pariis 13 que geminantur in septimo erunt in ipso
paria 34 cum quibus additis pariis 21 que geminantur in octavo mense.
erunt in ipso paria 44 cum quibus additis pariis 34 que geminantur in no
no mense erunt in ipso paria 89 cum quibus additis rursum pariis 44
que geminantur in decimo. erunt in ipso paria 144 cum quibus additis rursum
pariis 89 que geminantur in undecimo mense. erunt in ipso paria 233
cum quibus additis pariis 144 que geminantur in ultimo mense. erunt
paria 377 ⁊ tot paria peperit sicut par in prefato loco in capite unius
anni. Potes enim videre in hac margine. qualiter hoc operati fuimus. s. quod iuxtim
primum numerum cum secundo videlicet 1 cum 2 ⁊ secundum cum tercio. ⁊ tercium cum quarto. ⁊ quar
tum cum quinto. ⁊ sic deinceps donec iuxtim decimum cum undecimo. videlicet
144 cum 233. ⁊ huiusmodi sectorum coniclorum summam videlicet. 377
⁊ sic posses facere per ordinem de infinitis numeris mensibus.

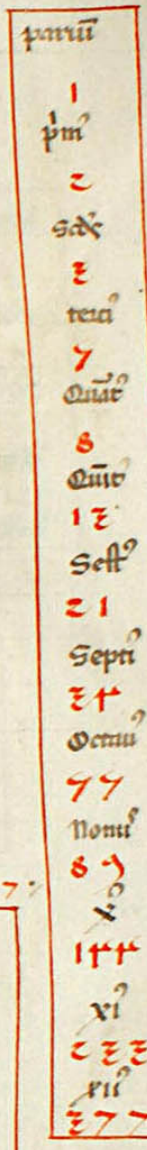
Quatuor homines sunt. quorum primus ⁊ secundus ⁊ tercius habent dracmas. secundus itaque ⁊ tercius ⁊ quartus
habent dracmas 31 tercius ⁊ quartus ⁊ primus habent dracmas 34 Quartus vero ⁊ primus ⁊ secundus
habent dracmas 37 Quaeritur quot unusquisque habeat. adde hos. iiii. numeros in unum erunt
129 quod numerus est triplum totius summe dracmarum illorum. iiii. hominum. Ideo quia in ipsam
summam unusquisque eorum tibi computatus est quare diviso ipso per 3 reddit 43 per eorum
summa. ex qua si extraxeris dracmas primi ⁊ secundi ⁊ tercii hominis. s. 27 remanebit
quarto homini dr 16 Item si ex ipsis dracmis 43 extraxeris dracmas 31 secundi
⁊ tercii ⁊ quarti hominis. remanebunt primo homini dr 12 Rursum si de dracmis 43
extraxeris 34 .s. dr tercii ⁊ quarti hominis ⁊ primi hominis. remanebunt secundo dr 9
Et adhuc si de dracmis 43 extraxeris dracmas 37 quarti ⁊ primi ⁊ secundi hominis
remanebunt tercio dr 6 Coniunctis itaque dracmis 12 primi hominis cum 9
secundi ⁊ cum 6 tercii et cum 14 quarti nimirum sicut reddit 43

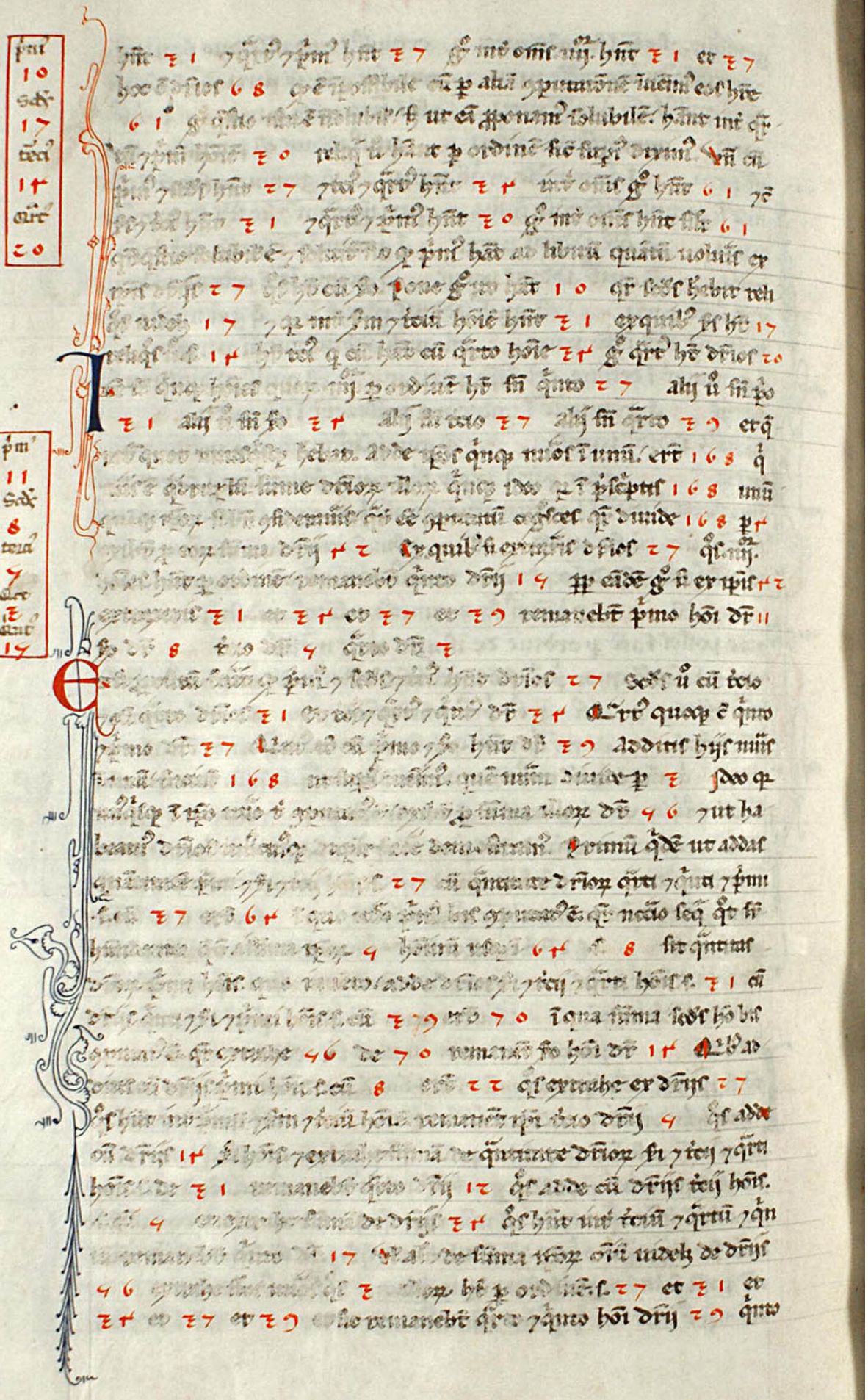
Item si propositum fuerit quod inter primum ⁊ secundum hominem habeant dracmas 27 Et inter secundum
⁊ tercium habent dracmas 31 Et inter tercium ⁊ quartum 34 inter quartum ⁊ primum 37
consimiles huius positionis quandoque solvi possunt. quandoque non. Unde ut ipse que solvi possunt
ab hiis qui solvi non possunt cognoscantur. talem tibi tradimus evidentiam. videlicet
ut addas numerum primi ⁊ secundi. cum numero tercii ⁊ quarti. ⁊ si eorum summa equalis fuerit
numero secundi ⁊ tercii ⁊ quarti ⁊ primi. tunc solubilis erit questio. si autem inequalis fuerit. tunc eam
non possis solvi cognoscas ut in hac questione in qua primus ⁊ secundus habent 27 et
tercius ⁊ quartus habent 34 quod inter omnes. iiii. habent dracmas 61 Nam secundus ⁊ tercius

parium
1
primus
2
secundus
3
tercius
7
Quartus
8
Quintus
13
Sextus
21
Septimus
34
Octavus
77
Nonus
89
x
144
xi
233
xii
377

27
primus
12
secundus
9
tercius
6
quartus
14

1 cum 2 et secundum cum tercio et tercium cum quarto et quartum cum quinto et sic deinceps donec iuxtim decimum cum undecimo videlicet 144





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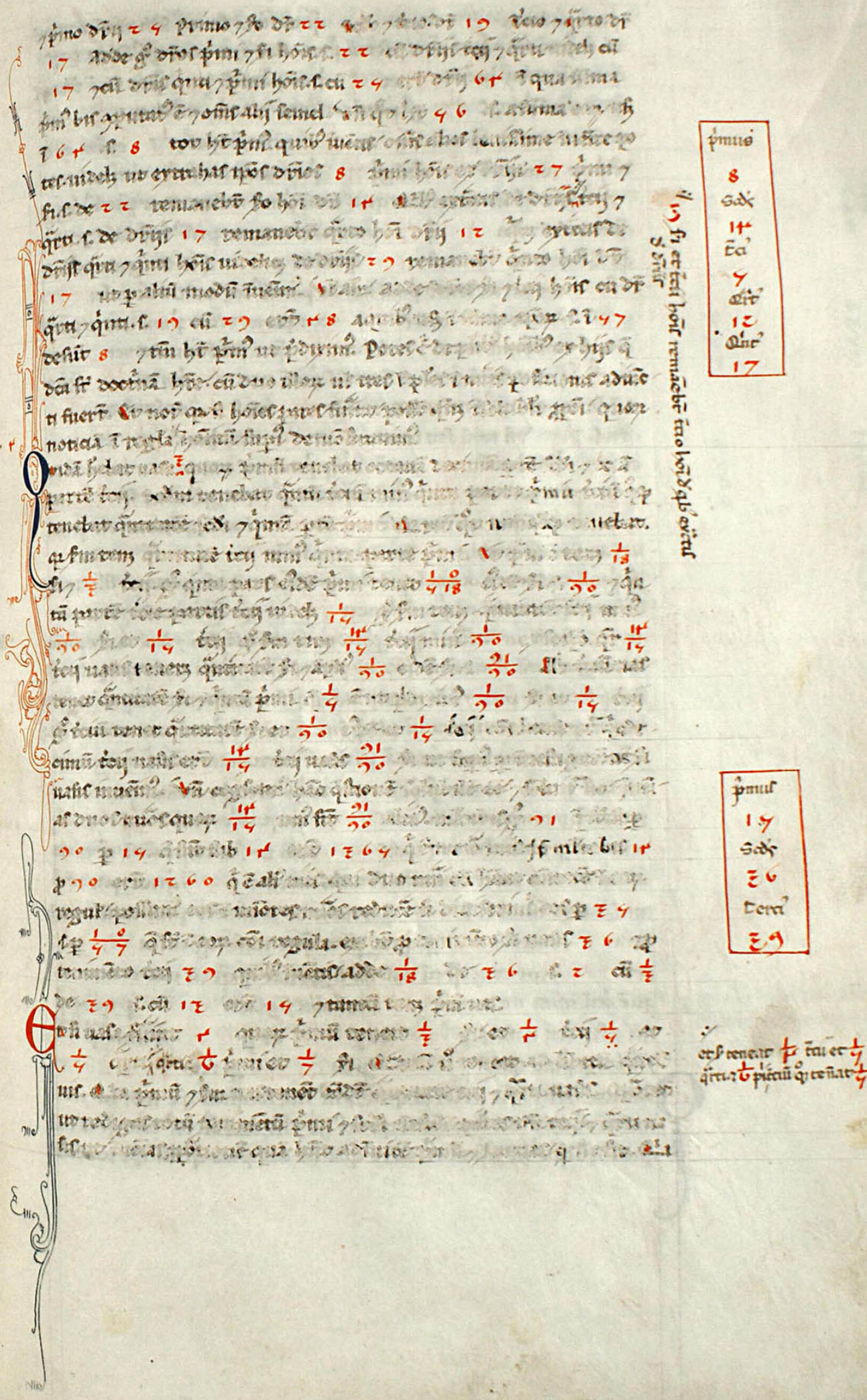

ꝑmū ual tem ½ ⅓ teꝛ er ¼ qꝛtu. ⁊ teꝛa ꝓ. cui sed. totū tenimē
tū ē qꝛtū teꝛ ⁊ qntū qꝛtu ⁊ sertū ꝑmi. Q3 teꝛa pꝛs ipi ē teꝛa pꝛs
qꝛte pt̄is teꝛ. hoc ē ⅓ ⅛ er ½ qnte pt̄is. s. 1/14 qꝛtu. Cꝛ ē teꝛa pꝛs
serte pt̄is ꝑmi. s. 1/18 g ꝑmū ual tem 1/12 1/24 udelicꝫ ⅛ teꝛ
ualis er 1/14 1/4 qꝛtu. s. 5/14 er 1/18 er scīpō qua 1/18 erūtu er eo
dē ꝑmo. remanēt 17/18 eidē g 17/18 ꝑmi ualis tem ½ teꝛ ualis et
5/14 qꝛtu. qꝛ ut hꝫ pꝛtes quas totū ꝑmū ual tenet er pt̄ub teꝛ ⁊
qꝛtu ualis. mlca ½ q 17/18 ꝑmi ualis tem er ptub teꝛ ualis ꝑ 18
q ē sb ungula de 17/18 erūt 6 q diuide ꝑ 17 q sē sē ungula. eribus
6/17 ⁊ tot pꝛtes tenet ꝑmū ual de ptub teꝛ ualis. silr mlca 5/14
ꝑ 18 ⁊ diuide ꝑ 17 eribus 24/8 4 ⁊ tot pꝛtes tenet ꝑmū ual er pt̄ub
qꝛtu. g totū ꝑmū tenet 6/17 teꝛ er 24/8 4 qꝛtu. ⁊ sē sm ual tenet 1/24 teꝛ
er ¼ qꝛtu er sertū ꝑmi. Q3 totū. s. ꝑmū tem 6/17 teꝛ er 24/8 4 qꝛtu.
Q3 serta pꝛs ipi ꝑmi tenet sertū de 6/17 teꝛ. s. 1/17 er sertū de 24/8 4
qꝛtu. s. 24/8 4 Vñ totū sm tenet 1/24 er 1/17 teꝛ. hoc ē 21/68 er
er 21/8 4 qꝛtu hoc ē 21/68 ⁊ muēim ē q ꝑmū ual tenet 6/17 teꝛ ualis. s.
24/68 ⁊ sm ual tenet 21/68 eidē teꝛ ualis. g ī qua ꝓpōtione sē 24/68 ad
21/68 hoc ē ī qua ꝓportione sē 24 ad 21 ī eidē ꝓpōtione erit ꝑmū
ual ad sm. qꝛ ertuhe 21 de 24 remanēt 3 q 3 sē 1/8 de 24
g ꝑmū ual tenet octauā ptē sui pluſq sm quā ꝓpōtionē silr potes
iuenire. ī qꝛto uase. cū ꝑmū teneat 24/8 4 er tō qꝛto uase. ⁊ sm tene
at 21/8 4 deīn ut iuenias ī qua ꝓpōtione sit adiuncē sm ⁊ teiū ual oꝑtet sit
ut redigas totū tenimētū tōr ad pꝛtes qꝛtu ⁊ ꝑmi ualis q habeas
sm q feci de ꝑmo ⁊ scdo uase. ⁊ iuenies q sm ual tenet magis teio. ⁊ ꝑ 3/24
iuenim q ꝑmū tem octauū pl q sm. Pone ut ꝑmū ual teneat aliq
nūm. erq cū ertuheris octauā pt̄ē ipi remaneat nūs q integraliter
diuidat ꝑ 24 teneat g ꝑm 120 de qb ertuhe octauā partē. s. 15
remanēt ꝑ tenimēto scdi ualis 105 er quib ertuhe 3/24 .s. 3 / 105
remanēt ꝑ tenimēto teꝛ ualis 96 deīn ut hꝫ tenimētū qꝛtu ua
lis. accipe teiā partē tenimēti si ualis uidelicꝫ 3 4 ⁊ qntā partē ꝑ
mi. s. 24 ⁊ adde ī iiml erūt 4 3 q ertuhe de tenimēto ꝑmi ualis uidelicꝫ
de 120 remanēt 61 ꝑ qnta pt̄e qꝛtu ualis. qꝛ mlca 61 ꝑ 4
erūt 204 ⁊ tot tem qꝛtū ual. sīlā si ꝓponat q qꝛtū ual teneat ali
quē teiū nūm ut dicim 100 mlcabis sīglariē 100 ꝑ miōs ꝑ singlariē
mi ⁊ si ⁊ teꝛ ualis. s. ꝑ 120 er ꝑ 104 er ꝑ 96 ⁊ diuide ꝑ 204 /
⁊ habebis ꝑ ꝑmo uase 21/61 3 ꝑ so 126/61 2 4 ꝑ teio 123/61 2 1
Quatuor hoīes hūt dūios er quib ꝑmꝰ dat so. qntū ipe scdꝰ hē ⁊ di
midiū ei. scdꝰ dat teio qntū ipe teiꝰ hē ⁊ ille teiā ei. teiꝰ dat qꝛto hoi
qntū ipe qꝛtꝰ hē ⁊ qꝛtā ei. Q3 cē qdā hō dat ꝑmo qntū ipi remāsit.

ꝑmū
120
S.
104
E.
96
G
204

p̄ dationē quā fec̄ so hōi 7 ilſ q̄mā el̄. 7 hu̇erūt oīs equalr. Q̄m p̄mꝰ dat so. q̄mū ūpe ſcōl hē 7 dimidiū el̄. g̈ li ff hē z p̄mꝰ dat ei z et ſic hē 4 Q̄r hoc q ff hūit añtea fuit ⅞ er hꝫ q hūit p̄a. Silr ſ hāc ūueſtigationē tēl hūit hō hūit p̄mū ⅞ er hoc q hūit p̄a. Et q̄r r̄ hō hē ⅘ et p̄mo remālerē 4/11 er hꝫ q hūit p̄a p̄ dationē ūde luer quā fecerat ſcōs hōi. ponel g̈ ī ordinē ⅞ et ⅞ et ⅘ et 4/11 et p̄ tpīs p̄ōe ½ Ideo q uñq̄ p̄ dationes ſcāt int̄ ſe hūit q̄rtam partē totī ſūme dr̄or tpor. uñ. hōiū ½ 4/11 ⅘ ⅞ 7/4 deñ er the 4 de 11 q̄ ſē ſub tpīs 4 remanēt 6 q̄ mlca p 1 q ē ff 1 erē 6 q̄ adde cāi mlcatōe de 1 q ē ff 1 ī 11 erē 17 q̄ mlca p 1 q̄ ſē ff 3 erē 68 q̄ p 7 q totū p 4 q̄ ff ſb ūgis erē 2 z 80 et tot hūit q̄rt hō. Rurſ acc ⅘ 7 ertuhe 1 de 3 rēmēt 4 p q̄ mlca 17 ūuēta — erē 84 ff q̄ adde mlcatōnē de 1 q ē ff 1 in 11 ducā ī 3 ſ. 33 erē 18 1 q̄ mlca p 7 q̄ ſē ff 7 q totū p 4 p̄me ūge erē 2 760 7 tot hūit tēl hō. Rurſ acc ⅞ 7 ertuhe 7 de 7 remanēt 1 p q̄ mlca 18 1 ūuēta erē 7 z 6 ff q̄ adde mlcatōnē de 1 q ē ff 1 ī 11 uicēſ 3 uicēſ 7 hoc ē 69 7 erē 1 2 3 q̄ mlca p 7 q̄ ſē ff 4 p̄me ūge erē 2 8 4 8 et tot hūit ff hō. Rurſ acc. ⅞ 7 eyrthe 7 de 4 remanēt 7 q̄ mlca 1 2 3 ūuēta erē 1 2 87 ff que adde mlcatōnē de 1 qꝫ ē ff 1 ī 4 q̄ ſē ff 11 uicēſ 3 uicēſ 3 uicēſ 4 q̄ ſē ſb ūgis. l. 14 7 4 erē 4 8 6 7 tot hūit p̄mꝰ ho. addat g̈ ūuenal q̄ntuuīb. uñ. hōiū. reddēt p totā ſūma eox 1 z 860 q̄ ſūma ūuēit er mlcatōe 3 ōiū uīox q̄ ſē ſb ūgis undeliez de 1 ī 11 uicēſ 3 uicēſ 7 uicēſ 4 Redige uraq ūuētos uīos ī lib 7 ſolid. erit ſūma eox lb 47 7 ſol. 14 Et dr̄ij p̄mi hōis ſē lb 2 1 7 ſol 8 7 dr̄ 6 dr̄ij q̄dē ſi hōis ſunt l 11 ſolid 18 er 6 dr̄ij ſiquidē ſecij hōis ſē lb 11 ſol 10 dr̄ij quoq q̄rti hōis ſē lb 3 ſol 18 7 dr̄ 1 § Et ſi ꝓpūat p̄ datōes p̄dās illos. uñ. hōib inequalr remanē fm aliq datū ꝓpōnē ut dictū illud q remālit ſo fuit tīn 7 tcia er hoc q remālit tcio hōi. ſ illud q remālit tcio hōi fuit tīn 7 dimidiū er eo q remālit q̄rto hōi. Inuēiat quidē nūor. uñ. qui ff ī dicta ꝓpōne erē 4 et 1 et z et 1 lā 4 ē q̄ntū 1 7 q̄rtū el̄ et 1 q̄ntū z 7 tcīū el̄ et z q̄ntū z 7 dimidiū el̄. Adde uraq hoc. uñ. nūor ī unū. erē 1 a q̄lb denōiā ſuīp ſeptor nūor. eribē 2/14 et 2/14 et 1/14 et 4/14 q̄ ff partes q̄ er tota ſūma 4/14 ff 1/14 et cet. Pone uraq hac. uñ. ſuenōel p̄ aliaſ ſuīp ī uētas. l. p 4/11 1/3 2/7 2/4 hiſ uraq p ordinē poſitis ſcipies a 4/11 erem hec 4 de 11 rēmēt 6 q̄ mlca p 4 que ff ff 1 2 ſuccūt z 0 que adde cū mlcatione de z q̄ ff ff 1 2 ī 11 erē 4 z q̄ p̄ōe ſb 4/11 et mlca ea p 1 q̄ ff ff 3 uicēſ 7 uicēſ 4 q̄ 7 et 4 ff ſub ūgis erunt

				2
				3
				4
				5
quarr	7280	11/14	26	
terra	8277	4/5	777	
ſoḷs	10000	11/14	9000	
mund	226847	11/14		

Iſti 4or hūerūt poſt dationes ſup dcās undeliert p̄mi hūit et tota ſūma

7280 et [illegible] accedes ad $\frac{4}{9}$ extrahes 4 de 9
remanent 5 per que multa inventa 52 erunt 260 quibus adde multacionem de
3 que sunt 14 et 11 vicibus 9 erunt 557 que [illegible] $\frac{4}{9}$ et multa per 3
que sunt 7 vicibus 5 que sunt [illegible] prima virga erunt 8355 [illegible]
[illegible] accedes ad $\frac{3}{7}$ extrahes 3 de 7 remanent 4 per que multa
557 inventa [illegible] de 4 que sunt 14 et 11 vicibus 9 vicib; 7
erunt 5000 que [illegible] $\frac{3}{7}$ et multa ea per 2 que sunt super 5 prime virge
erunt 10000 [illegible] accedes ad $\frac{2}{5}$ extrahes de 2 de
5 remanent 3 que multa per 5000 [illegible] de 5 que sunt 14
[illegible] 5 que sunt 11 vicibus 9 vicibus 7 vicibus 5 erunt 22875 [illegible]
[illegible] 14 per 11 vicibus 9 vicibus 7 vicibus 5 [illegible]
[illegible] 5 [illegible]
[illegible] 4575 que sunt 19 [illegible] 1 [illegible] 3 [illegible] 2000 [illegible]
sunt lib 8 [illegible] 6 [illegible] 8 [illegible] 1671 qui sunt lib 6 [illegible] 19 [illegible] 3
[illegible] 14576 [illegible] 6 [illegible] 1 [illegible] 4 [illegible]
[illegible] 40 [illegible] 8 [illegible] 6 [illegible]
[illegible] 5/14 [illegible]
5/14 [illegible]
[illegible] 5 [illegible] 6 [illegible] 11 [illegible] 11
[illegible] 5/14 [illegible] 5/14 [illegible] 5/11 [illegible] 6/11 [illegible]
[illegible] 5/11 [illegible] 5/14 [illegible] 5/14 5/11 [illegible] 25/154
[illegible] 6/11 [illegible] 5/14 [illegible]
[illegible]
[illegible] 30/154 [illegible]
[illegible] 30 [illegible] 154 [illegible] 5 [illegible] 14
[illegible] 6 [illegible] 11 [illegible] 5 [illegible] 11 [illegible] 30 [illegible]
[illegible] 2/11 [illegible]
[illegible] 2 [illegible] 14 [illegible] 2 [illegible] 14 [illegible] 11
vicibus 2 [illegible] 11 vicibus 14 [illegible] 22 [illegible] 154 [illegible]
[illegible] 2 [illegible] 14 [illegible] 11 [illegible] 22 [illegible]
[illegible]
[illegible] 52 [illegible] 154 [illegible]
[illegible] 14 vicibus 11 [illegible]
30 [illegible] 22 [illegible] 5/9 [illegible] 4/9
[illegible]

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ũ ptrũ ei. vũ ti er dicũ ꝓtõnone. l da 42/147 acquiend 5/9 hebm dñi
q̃ru hõis. Ilã 5/9 er 42/147 acquiẽ sic mleãt & ꝑ 47 sũt 208
q̃ denoiandi fit anũo q̃ egredit er mleãt de 147 ī 9 hoc ẽ anũo q̃
egredit er 1ª mcab 11 mcab 9 l.a. 1386 g̃ ꝓportio dñi ꝑ q̃ru
hõis ad totũ sũmã ẽ sic 208 ad 1386 er eo sup̃ mleanm̃ 47 ꝑ 1ª
que fit fr 9 Et q̃n dñi q̃ru hõis ad totã sũmã fit hẽ 208 ad 1386
erũ g̃ dñi q̃ru hõis ad totã sũmã sic q̃libet septupl̃ de 208 ad q̃n
q̃libet septupl̃ de 1386 Ilã q̃libet septupl̃ de 208 ẽ illud q̃ fit ex
fecm̃ q̃ mleanm̃ 47 ꝑ 1ª que fit fr 9 l. 208 mcab 7 mcab
4 er hũm̃ 7280 ꝑ dñi q̃ru hõis sic q̃libet septupl̃ de 1386 ẽ
illud q̃ egredit er mleãtẽ de 1ª mcab 11 mcab 9 mcab 7 hoc ẽ
q̃ fecm̃ eũ hũm̃ totã sũmã l. 18410 Et q̃n ẽ hẽ 728 ad 18410
ita dñi q̃ru hõis ad totã sũmã. deo si sũma ẽ 18410 er q̃d ho he
hic 7280 ut inuenm̃ ei. sñiã ñ accedam̃ ad mẽtionẽ dñoꝝ eoꝝ hõis
fuerũ ẽ sup̃ q̃m hñt 5/9 ī sup̃ficiẽ 42/147 mleanm̃ sup̃ 4
ꝑ 47 .l.p 9 extrem̃ ñ q̃ fit 9 sunt g̃ ꝓportio dñoꝝ q̃ eũ hõe de
dñi q̃ru hõis hẽ ẽ 260 ẽ ad nũm. q̃ egredit er mleãtẽ de 1ª ī .l. ad 9
eũ q̃ egredit er mleãtẽ de 1ª ī 11 mcab 9 er q. ide deo hõis re
manẽt ꝑ hãc dationẽ 5/1ª tot sume sunt ꝓportio sup̃ remanẽtis ad
totã sũmã hẽ 7 ad 1ª Ilã hẽ 7 ad 1ª ma mleãto de 7 ī 11 mcab 9 ẽ ad mleationẽ d 1ª ī 11
mleatio q̃dẽ de 7 ī 11 mcab 9 hec 297 g̃ ꝓportio dñoꝝ q̃ remã mcab; 9
sert deo hõi ꝑ dationẽ quã fec q̃ru hõis ad totã sũmã ẽ hẽ 297 ad
nũm qui egredit er mleãtẽ de 1ª ī 11 mcab 9 q̃ ꝓportio hoc q̃
tione dationis quã debit q̃ru hõis ẽ ad totã sũmã hẽ 297 ad nũm q̃ ꝯ libi fecm̃ sñi aĩ addim 297 aĩ
egredit er mleãtẽ de 1ª ī 11 mcab 9 / ẽ illud ꝑ hñt hõis q̃ re 260 er posiũ sũma eop. l.
cepit dationẽ quã ei fecer hõis hoc sunt dare quã ꝑ hec deo q̃ru hõis habet 447 sub. 5/9 hec ẽ ꝓtione
q̃ru hõis hẽ hẽ 7 ꝑ debet ei. g̃ sñi hõis hẽ 7 ꝑ debet er 1ª .l. er ꝑdem ꝓportiõe 5/7 si qua 447 sẽ ad nũm q egdi
fuerũt ep dñi hi et 5/7 ep dñi eop. Et deo accipiende sũt 5/7 ep er mleatiõe d 1ª ī 11 mcab 9.
ꝓtionel mleanda sũt 447 ꝑ 7 erũ 1671 er nũc q̃ egredit q̃ mle
atiõne de 1ª ī 11 mcab 9 mleanm̃ ꝑ 7 hñt deo q̃ru hõis ad totã
ej hõis ad totã sũmã hẽ 1671 sñi ad nũm q̃ egredit er mleãtẽ de 1ª
ī 11 mcab 9 mcab 7 mcab 4 Ideo mleatiõnẽ de 1671 mleanm̃
ꝑ 4 er hũm̃ ꝑ dñi eop hõis 8744 Hñc ñ accedam̃ ad mẽtio
nẽ dñoꝝ si hõis fuerũ ẽ sup̃ q̃m hñt 5/9 er ꝓportiõe q̃ hñt 447
ad nũm qui egredit er 1ª mcab 11 mcab 9 ꝑ dationẽ quã fec deo
hõi. g̃ ꝓportio ꝑ dationis ẽ ad totã sũmã hẽ ꝑ ad nũm q̃ egredit er 1447
1ª mcab 11 mcab 9 mcab 7 ideo mleanm̃ sup̃ 447 ꝑ 1ª q̃
remanẽt de 7 extrem̃ ñ q̃ fit fr 7 hũm̃ 2228 g̃ dationis quã
fec deo ẽ ad totã sũmã hẽ 2228 fit ad nũm q̃ egredit er 1ª mcab

1r uicab 11 uicab 7 uicab 7 Et qm p hāc dationē sedo remāserē 1r/11 fuit illa remansio ad totā sūmā sic 1r fē ad 1r illā sic 1r fē ad 1r tm 1r uicab 11 uicab 7 uicab 7 .s. t 777t fē ad 1r uicab 11 uicab 7 uicab 7 gō ꝓpōno dīcō q̄ remanserē so hōi cui cūs q̄s dedit tcio ē ad totā sūmā sic t t t 8 et t777t hoc ē 4000 ad nūm q̄ egredīt er 1r uicab 11 uicab 7 uicab 7 et ideo ponūm sup 4000 sub 3/7 huīt ē sēs hāc ꝓpōnē cui dationē quā ei dederūt p̄m que dano fuit q̄ntū ipe fē habuit 7 dimidiū ei. Q̄ er dēi ꝓpōne 3/7 fuerē er dīsi p̄ mi hōis et 3/7 er dīsi fi. gō recipiende sē 3/7 er dēi ꝓpōne va fuerē er dīsi p̄mi hōis et er dīsi fi. gō recipiende sē er dēi ꝓpōne hoc ē mlīa fē 4000 p t q̄ sē sī 4 erē 10000 erē map dīsi fi hōis ad totā sūmā sic 10000 sē ad nūm q̄ egredīt er 1r uicab 11 uicab 7 uicab 7 uicab 4 nā nūs q̄ egredīt er hui sūma. q̄ et 1000 erē dīsi fi hōis. Et q̄m ut dcm ē p̄m huīt 3/7 i ꝓpōne quā 4000 huīt ad 1r uicab 11 uicab 7 uicab 7 p dationē quā fece so hōi gō mlīa fē 4000 p t erē 14000 gō dano quā p̄m fece so ē ad totā sūmā sic 14000 fuit ad nūm q̄ egdīt er 1r uicab 11 uicab 7 uicab 7 uicab 4 Q̄ hoc qđ dedit p̄mo so fuit 14000 q̄ addenda fē cui huic q̄ eidē p̄mo remāserē p q̄m dationē. Q̄ua remōne in ueīm ē supi 5/11 er 5/1r tot sūme hic ē sic q̄nq̄es q̄nq fē ad 1r uicab 11 tm illa remōsio ad totā sūmā. illā sic q̄nq̄es q̄nq fē ad 1r uicab 11 tm q̄nq̄es q̄nq fē ad 1r uicab 11 uicab 7 uicab 7 uicab 4 .c. ad totā sūmā. er ideo mlcuum sup 4 que sē sī 1r p 4 q̄ sē sī 11 uicab 7 uicab 7 uicab 7 uicab 4 et hūm 787 4 p eo q remānūt p̄mo p dationē q̄ fecerī so quib addīt cui 14000 q̄ dedit sēdo reddē t t87 4 p dīsi p̄m hōis. ℭ Rursꝰ si ꝓponat q unūq̄q; illoꝝ .uij. hōim suā dationē relīq̄t tib ꝓpōnē secūdi 7 sine illoꝝ .uij. dationū equalr hūisset. q̄m p mi relīq̄s trib dedit q̄ntū ipi habuit 7 dimidiū ei. gō si ipi tres habuit t p̄m dedit eis. 7 t et sic illud qđ hūerē aīi fuit 3/7 er hic q hūerē pa. Q̄ habuit 3/7 7 inuenīt eōdē in 3/7 et 5/9 et 5/11 et ponet cui 1/1r p q̄rtā partē quā i fine hūisse unūq̄q ꝓpōit 1/1r 5/11 5/9 3/7 3/4 et recipiet a 5/11 eyrnhēt 4 de 11 remanēt 6 q̄ mlea p 1r que sē sub ūga 7 addet mlcationē de 1 q̄ē sē ipa 1r i 4 que sē sī 11 erē t 7 aīlea gō t 7 p 1r que sē sī 7 q̄ p t q̄ sē sī 7 q̄ p t q̄ sē sī 4 erē 6 7 6 7 tot huīt q̄rū ho. Jē eyrnhe 1r de 7 remanēt 4 q̄ fua 7 mlea 1r q̄ sē sb ūga p 11 que p 4 fuat erē t8 0 q̄b sūd de mlcationē de 1 q̄ē sē 1r i 4 q̄ sē sē 11 q̄ p 1r q̄ sē sī 7 erē t1r0 q̄ p t que p t q̄ sē sī relīq̄t fuacōib erē 11r0 et tot huīt tcī. Rursꝰ icipias a 1r q̄ sē i capite unge mlcās ipa p 11 uicab 7 uicab

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ꝑ ꝑ ipā uidelicꝫ ꝑ q̄ remanēt de 7 erc̄ēt in̄ z q̄ fē fr̄ 7 erc̄ 1 4 8 ꝑ quib⁹ adde mlcationē de 1 ī 4 uicab⁹ ꝑ uicab⁹ z q̄ fē fr̄ ungis erc̄ 1 6 ꝑ ꝑ q̄ mlca ꝑ z q̄ fē fr̄ 4 erc̄ z z 8 8 et tot hūit sc̄ds. Adhuc ītcipiat a ꝑ uicab⁹ 11 uicab⁹ 3 uicab⁹ 7 q̄ ꝑ z q̄ restāt er 4 erc̄ēt in̄ z erc̄ 8 z 16 q̄b⁹ fiūdde 12 o q̄ eḡdūt er mlcatōe oīū nūoꝝ qui fr̄ fr̄ ugis erc̄ 8 ꝑ z 6 7 tot hūit ꝑmꝰ ho. Et sī ī fine dationū stet ꝓ remāserit 7/12 totī sūme ho 7/12 teio 7/12 q̄rto 7/12 scribe q̄stionē ī hūc modū. ¶ Post h̄ extrā hoc 4 de 11 remanēt 6 que mlca ꝑ 1 ꝑ 7 adde mlcationē de z q̄ fē fr̄ 1 ꝑ ī 4 q̄ fē fr̄ 11 erc̄ 3 ꝑ q̄ mlca ꝑ ꝑ q̄ fē fr̄ 3 q̄ ꝑ z q̄ ꝑ z q̄ fē fr̄ ugal erc̄ z z 4 6 et tot hūit q̄rtꝰ hō. Nunc ītcipe a 7/12 mlcatōs 1 ꝑ 11 uicab⁹ 4 q̄ 4 restāt de 3 erc̄ēt⁹ er ipīs ꝑ q̄ fē fr̄ 3 erc̄ 7 7 o fr̄ q̄ adde mlcationē de z q̄ fē fr̄ 1 ꝑ que ꝑ z que fē fr̄ 4 erc̄ ꝑ 3 8 o 7 tot hūit tcī hō. Nunc ītcipias a 7/12 mlcās ꝑ 1 ꝑ ꝑ 11 uicab⁹ 3 uicab⁹ ꝑ q̄ ꝑ remanēt de 7 erc̄ēt⁹ in̄ z q̄ fē fr̄ 7 erc̄ 4 4 ꝑ ꝑ fr̄ q̄ adde mlcatōes de ꝑ q̄ fē fr̄ 1 ꝑ ī 4 q̄ fē fr̄ 11 ī ꝑ que fē fr̄ 3 er ī z q̄ fē fr̄ 7 .s. z ꝑ o erc̄ 4 7 8 ꝑ q̄ mlca ꝑ z que fē fr̄ 4 erc̄ 11 4 6 8 7 tot hūit fr̄. Dein ītcipias a 5/12 mlcās 1 ꝑ ꝑ 11 uicab⁹ 3 uicab⁹ 7 uicab⁹ z q̄ z remanēt er 4 erc̄ēt⁹ in̄ z erc̄ z 3 10 6 q̄b⁹ fiūdde 4 q̄ fē fr̄ 1 ꝑ uicab⁹ 4 q̄ fē fr̄ sup 11 uicab⁹ ꝑ q̄ fē fr̄ 4 erc̄ z 3 8 z 6 7 tot hūit ꝑmꝰ hō.

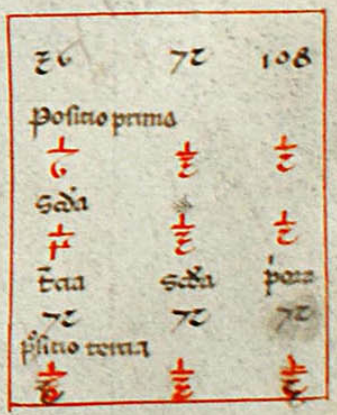
Inuestigat⁹ hoc regla sic q̄n q̄rtꝰ hō qui ultimā fec̄ dationē dedit rehāt tribꝰ q̄ntū ipi hebāt 7 q̄ntū ei 7 ei remāsit 7/12 totī sūme ut ꝓpositū ē. g⁹ er 12/12 .s. er hoc q ipi tres hoies hūerūt ipe q̄rtꝰ hō dedit 6/11 h 6/11 er 12/12 totī sūme fē sic 12 uicab⁹ 6 ad num q̄ egredit er 1 ꝑ uicab⁹ 11 et 12/12 totī sūme q̄ rēanēt q̄rto hoi ꝑ dationē suā fē ad totā sūmā sic ē mlcatio de z ī 11 ad mlcationē de 1 ꝑ ī 11 g⁹ hoc q q̄rtꝰ hō hebat q̄n suā dationē rehāt fec̄ fuit ad totā sūmā sic 12 uicab⁹ 6 et z uicab⁹ 11 fē ad 1 ꝑ uicab⁹ 11 3 z uicab⁹ 11 fē q̄ntū uicab⁹ 6 eī z uicab⁹ 4 et 12 uicab⁹ 6 eī z uicab⁹ 6 fē q̄ntū 1 ꝑ uicab⁹ 6 g⁹ illud q hūit q̄rtꝰ hō q̄n suā dationē fec̄ fuit ad totā sūmā sic 1 ꝑ uicab⁹ 6 et z uicab⁹ 4 fē ad 1 ꝑ uicab⁹ 11 7 hoc fecim⁹ sup q̄n mlcauim⁹ 1 ꝑ uicab⁹ 6 et addidim⁹ mlcationē de z q̄ fē fr̄ 1 ꝑ ī 4 q̄ fē fr̄ 11 et sic hūim⁹ 3 ꝑ g⁹ illud qđ hūit q̄rtꝰ hō q̄n fecit dationē suā fuit ad totā sūmā sic 3 ꝑ ē ad num q̄ egredit er 1 ꝑ uicab⁹ 11 3 hoc hūit ipe eī ī receptū tres dationes ab alijs. Vñ ītcipim⁹ ab alia dationē ultima quā fec̄ tcī hō q dedit ei q̄ntū ipe hebat 7 q̄rtū ei. hoc ē si q̄rtꝰ hō hūit 60 ꝑ et ille tcī dedit ei 4 g⁹ q̄rtꝰ hō hebat 5/5 er dein ꝓportione .s. ei quā hē 3 ꝑ

ꝑ 7/12 ꝑ 7/12 ꝑ 7/12 ꝑ 7/12 ꝑ 7/12 ꝑ 7/12 ꝑ 7/12

4 uicab⁹ z q̄ fē fr̄ 7 uicab⁹ z q̄ fē fr̄

s. $\frac{1}{2}$ [illegible] s. $\frac{2}{3}$ [illegible] $\frac{1}{3}$ s. $\frac{1}{2}$ [illegible] $\frac{1}{6}$
s. $\frac{1}{2}$ [illegible] $\frac{2}{6}$ s. $\frac{1}{2}$ [illegible] $\frac{2}{3}$
primi numeri cum $\frac{1}{3}$ [illegible] et $\frac{1}{18}$ [illegible] $\frac{1}{2}$
primi numeri et $\frac{1}{2}$ [illegible] et $\frac{2}{3}$ [illegible]
[illegible] $\frac{1}{2}$ primi numeri et $\frac{1}{3}$ [illegible] et $\frac{1}{18}$ [illegible] $\frac{1}{6}$ primi numeri s.
$\frac{2}{12}$ equales et $\frac{2}{3}$ [illegible] cum $\frac{17}{18}$ [illegible]
[illegible] $\frac{2}{12}$ primi numeri [illegible] et $\frac{17}{18}$ [illegible] $\frac{7}{12}$ primi [illegible]
[illegible] $\frac{7}{3}$ [illegible] et $\frac{234}{36}$ [illegible] $\frac{7}{12}$ primi
[illegible] $\frac{17}{18}$ [illegible] $\frac{1}{36}$ [illegible] $\frac{7}{12}$ [illegible] $\frac{7}{3}$ [illegible] $\frac{234}{36}$ [illegible]
[illegible] $\frac{17}{18}$ [illegible] $\frac{1}{36}$
[illegible] $\frac{7}{3}$ [illegible] $\frac{234}{36}$ [illegible] $\frac{7}{3}$
[illegible] et $\frac{36}{36}$ [illegible] $\frac{1}{2}$ [illegible] $\frac{234}{36}$ [illegible]
[illegible]
[illegible] 1 [illegible]
[illegible] 12 [illegible] $\frac{2}{3}$ [illegible]
12 [illegible] $\frac{17}{18}$ [illegible] 1 [illegible] $\frac{1}{6}$ [illegible] $\frac{2}{3}$ [illegible]
$\frac{17}{18}$ [illegible] 22 [illegible]
[illegible] 17 [illegible] Possumus [illegible] alr
[illegible] $\frac{8}{3}$ [illegible] et $\frac{1}{3}$ [illegible] $\frac{1}{6}$ [illegible] $\frac{1}{6}$ [illegible]
[illegible] $\frac{16}{3}$ [illegible] et $\frac{2}{3}$ [illegible] $\frac{1}{2}$ [illegible] $\frac{1}{6}$ [illegible]
[illegible] $\frac{1}{2}$ [illegible] $\frac{7}{3}$ [illegible] $\frac{1}{6}$ [illegible] $\frac{1}{18}$ [illegible]
[illegible] $\frac{1}{6}$ [illegible] $\frac{7}{3}$ [illegible] $\frac{1}{18}$ [illegible] $\frac{1}{2}$ [illegible] $\frac{2}{3}$
et $\frac{16}{3}$ [illegible] $\frac{1}{6}$ primi numeri et $\frac{2}{3}$ [illegible] et $\frac{1}{18}$ [illegible] $\frac{7}{3}$
[illegible] equales [illegible] $\frac{1}{6}$ [illegible] $\frac{31}{18}$ [illegible]
[illegible] $\frac{7}{3}$ [illegible] $\frac{67}{3}$ [illegible] $\frac{7}{3}$ [illegible] $\frac{1}{6}$
primi numeri et $\frac{31}{18}$ [illegible] $\frac{31}{18}$ [illegible] $\frac{11}{2}$ [illegible]
[illegible] $\frac{1}{6}$ primi numeri [illegible]
[illegible] 22 [illegible]
[illegible]
[illegible] 41 [illegible]
[illegible]
30 [illegible] 14 [illegible] 6 [illegible] $\frac{1}{2}$ ex
hoc [illegible] $\frac{1}{4}$ [illegible] $\frac{1}{4}$ [illegible] $\frac{1}{2}$ [illegible] $\frac{1}{2}$
[illegible] $\frac{1}{6}$ [illegible]
[illegible] $\frac{1}{6}$ $\frac{1}{2}$ $\frac{1}{2}$ [illegible]
[illegible] $\frac{1}{2}$ [illegible] $\frac{2}{3}$
[illegible] $\frac{1}{2}$ [illegible] $\frac{1}{2}$ [illegible]
$\frac{1}{2}$ [illegible] $\frac{1}{4}$ [illegible]
sub positione prima $\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}{2}$ [illegible]

36	72	108
Positio prima		
$\frac{1}{6}$	$\frac{1}{2}$	$\frac{1}{2}$
Secunda		
$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{2}$
Tercia	Secunda	Prima
72	72	72
Positio tercia		
$\frac{1}{6}$	$\frac{1}{2}$	$\frac{1}{2}$



positionis se sub qb' ½ ponet ½ et ppt' ½ quā rehūit unūsq; et hoc qđ
q' erc positū fuit ī cōe de positōe tcia. deīn mlca 6 ī qb' repūnt ruptu ꝑme
positōis ꝑ 12 ī quib' ½ repunt ruptu positōis se erī 72 q̄ō mlca
ꝑ 72 eā ī 72 repunt ruptu pōitōis tcie erī 216 et tot pōe ꝑ sūma
totū ꝓcūe quox ½ pōe sī ½ ꝑme positōis. s. 108 7 tcia. s. 72 sī
½ 7 sexta sī ⅙ que ē 216 post hec acc. et ꝑdēs nūs ꝑ ordinē pī
tcie se pōitōis. s. ½ de 108 et ½ de 72 et ¼ de 216 erī 54 et
324 et 3 s. 87 et tot poluerī ī cōi. deīn dūde ꝑdā 216 ꝑ
partes tcie positōis. eribū 72 sī unaquaq ½ Et rubie q̄dē ꝑtū 72
de 108 remanēt 216 quox ½ acc. ꝑ ½ q' ē de sa pōitione. erūt 18
addita q̄ sua ī manū 7 et rubie sa 72 de 72 q̄s sī ½ remanet 0
cui acc. ꝑ ½ que ē ī sa pōitōe erit 0 q̄ adde eā 18 fiunt erūt
18 et q̄ 72 q̄ sī ī tcio loco. s. sī ½ tcie pōitōis nō possīt ertuhi
de 216 ertuhe 216 de ipis 72 remanebū 216 diminuta. de quib' acc
¼ ꝑ ¼ q̄ē in sa positōe erī diminuta 3 q̄ abice de 18 fiunt
remanēt 3 addita. Q. ī eā sīt addita debēs ei ertuhē de 216 Et si
ēent diminuta adderes ei remanebū 207 q̄ sī sūma q̄ remānt eis ꝑ
pōita 87 ī cōe. q̄s addes ei illimit erī 3 ½ ꝑ sūma totū ꝓcūe
ipox de quox medietate. s. de 1 ½ 7 ertuhe tcia de 87 quā reha
buit ꝑm. s. 23 remanēt 118 qb' sīadde ½ coīt ꝑ ½ se positōis
erī 177 7 tot hūit ꝑm' de ꝑcepta ꝓcūa. s. ut' de pōtione sa hōis
s. d 1½ d 3 ½ abice 23 q̄ rehūit rpē et ꝑdēs 87 remanebū 63 sup
q̄ pōe ½ coīt ꝑpt' ½ se pōitōis erī 93 7 tot hūit fl. adhue de 44
que sī ⅙ de 3 ½ s. de portōe tcij hōis ertuhe 23 remanebū 20
qb' adde ¼ coīt ꝑ ¼ se positōis erī 24 7 tot hūit tcī hō. ſ er sū ꝑ
poītēt ꝑmū rehūisse ½ et hoc q̄ poluerī ī cōe sm ½ tcīū ⅙ opi
beris ut sup' dom hal 87 deīn lb' sa pōitōe pōe ī tcia ⅙ ½ ½ s.
partes q̄ rehūerī et posito ī cōe q̄s partes acc. de 216 7 hebis 108
sī ½ et 72 sī ½ et 216 sī ⅙ ut ī hac alia ēmt' deleptōe. Et
q̄ ertūs ipīs nūs ꝑ ordinē de nūs qui sī sī ꝑmā positionē nichil
remanet. ꝑo nichil debem' addere ut ertuhē a 216 Q. ī 216 erūt
reliquū q̄ remanet eis posita 87 ī cōe. Q. ī adde 87 et 216 erūt
302 ꝑ sūma totū ꝓcūe quā dundes int' eos ordie q̄ diuisū 3 ½
7 inueniet ꝑmū hūisse 162 sm 36 tcīū. s. ut' dundat' id q̄ poluerī
ī cōe ita q̄ ꝑm' rehāt ibi ½ sī ⅔ tcī ⅒ positis q̄dē ꝑtib' trib' po
sitionū ut hic ēmt' mlca 6 ꝑ 12 q̄ ꝑ 10 ī quib' repunt fractōes
tū positionū. erī 720 q̄ pōe dundo ꝑ partes ꝑme positōis 7 tcie et
hebis 260 sī ½ et 130 sī ½ et 120 sī ⅙ et sī ꝑtes tcie positio
nis. hebis 260 et 288 et 72 deīn acc. ꝑ ordinē ½ de 260

216	72	108	
⅙	½	½	ꝑmā
¼	½	½	secda
108	72	216	
⅙	½	½	tercia

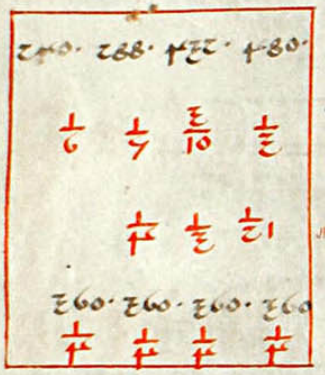
170

er ½ de 240 er ¼ de 120 .s. partes se positōis erūt 180 er 80 er 30 q̄ fiūt in suma 290 7 tot poluerūt in cōe. deinde de 260 p̄me positōis ernahe 260 tēe remanet 0 cui⁹ dimidiū cū sit 0 relinq̄ 7 de 288 ernahe 240 remanēt 48 diminuta er hoc dico cum 288 si possit ernahi de 240 de q̄b⁹ 48 acc. ½ p ½ se positōis erūt 16 diminuta q̄ sua er ernahe 72 de 120 remanēt 48 addita p q̄b⁹ ¼ hēnt 12 sibi addita. Oppōe itaq; addita cū diminutis .s. 12 cū 16 remanebūt 4 diminuta q̄ adde cū 720 erūt 724 7 tot remanserūt eis positis 290 plenus q̄b⁹ iimk addita reddit 1014 p suma tocius precii eox. deinde diuide 290 p partes tēe positōis 7 habes 147 sub ½ et 116 sub 2/7 et 29 sub 1/10 et 1014 diuide p partes p̄me positōis uidelicet 407 et 288 et 160 demde de 407 ernahe 47 remanēt 362 q̄b⁹ adde ½ eox. p̄t ¼ q̄ est in sua positione erūt 474 7 tot sup̄fluit p̄mi de cōi precio. Sibi de 288 ernahe 116 remanēt 172 quib⁹ si adde tertiā eox erūt 296 7 tot sup̄fluit .s. Je ernahe de 160 remanēt 140 q̄b⁹ adde q̄rtā eox erūt 174 7 tot sup̄fluit tertio de p̄dēo precio. Et si dicat⁹ summe tocius precii fuisse 100 milia 474 et 296 et 174 p 100 7 diuidat unāq̄q; milliationē p 1014

Tres homines habent precium eidem de q̄ ½ sit p̄mi si 2/7 tertij 1/10 quā cū sumerent inter se fortuitu p̄mus et hoc q̄ cep̄t posuit ½ in cōe. secūd ½ tertius ⅙ et quilibet eox suā huius portionē p p̄ma q̄de positōe p̄t 1/10 2/7 ½ 7 p tertia in ½ p si quoq; oportebit ponere ¼ ½ 1 cū id q̄ posuit p̄mus in cōe fuit q̄ tū illud q̄ remansit ei. 7 id q̄ posuit .s. fuit ½ est q̄ remansit. 7 positio tertij fuit ¼ sibi residui. p̄e itaq; ipsis positionel in ordine 7 milia 10 p 10 q̄ p 2 7 habes 200 in quib⁹ reperiūt fuisse tres positiones. q̄r p̄e 200 in partes p̄me 7 tēe positōis diuisa sic ipsis positōes 7 habes sic p̄mā positionē 140 et 120 et 20 et sic tertia habes 100 .s. demde acc. partes se positōis de nūis simplicib⁹ uidelicet 140 et 60 et 6 hoc est in suma 216 q̄ habeant p eis q̄ posuerūt in cōe. Je ernahe 100 de 140 remanet 40 q̄ diuide p 1 se positōis. erūt 40 addita. adhuc ernahe 100 de 120 remanēt 20 quox medietas sit 10 addita q̄ adde cū 40 addunt erūt 60 addita. Je ernahe 20 de 100 remanēt 70 diminuta quox q̄nta sit 1/4 diminuta. q̄b⁹ erūtis de 60 additis remanēt 46 additis q̄ ernahe de 200 remanēt 154 q̄ sit residuū. Q̄r adde ei cū 216 erūt 370 p suma precii eox quā cū diuiseris ordine demōstrato inuenies p̄mū sup̄fluisse 226 sm 174 q̄ cū iimk nūgūt facient plus de 370 Q̄r hec q̄o nō pot

163	228	407
120	240	260
½	½	½
¼	½	½
72	288	962
1/10	2/7	½
24	116	474

20	120	140
1/10	2/7	½ p̄ma
¼	½	1 secūda
100	100	100 tertia
½	½	½



[illegible] pecunia [illegible] hominis [illegible] est [illegible] quam [illegible] hominis [illegible] fortuitu [illegible] primum [illegible] hominis [illegible] primum [illegible] ex hoc [illegible] $\frac{1}{2}$ [illegible] $\frac{1}{6}$ [illegible] pecunia [illegible] quam [illegible] hominis [illegible] hec de re[illegible] [illegible] id quod [illegible] 326 [illegible] 174 [illegible] pecunia [illegible] hominis [illegible] 30 [illegible] 20 [illegible] 30 ad 20 [illegible] 326 ad id quod [illegible] 174 [illegible] 326 et 174 [illegible] 20 [illegible] 30 [illegible] $\frac{2}{3}$ [illegible] $\frac{2}{3}$ 217 et 116 [illegible] 20 [illegible] $\frac{1}{3}$ 313 [illegible] 100 [illegible] 470 ad 100 [illegible] 30 ad pecuniam [illegible] 10 [illegible] 30 [illegible] 47 [illegible] $\frac{18}{47}$ 6 [illegible] 100 [illegible] $\frac{18}{47}$ 106 [illegible] 326 [illegible] 174 [illegible] 400

De eodem inter iiii homines

[illegible] pecuniam [illegible] $\frac{1}{4}$ [illegible] $\frac{1}{6}$ [illegible] $\frac{1}{3}$ [illegible] $\frac{1}{4}$ [illegible] $\frac{1}{4}$ [illegible] $\frac{1}{4}$ [illegible] $\frac{1}{6}$ $\frac{1}{4}$ $\frac{3}{10}$ $\frac{1}{3}$ [illegible] $\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{21}$ [illegible] $\frac{1}{4}$ [illegible] 2190 [illegible] 1034 [illegible] 666 [illegible] 300 [illegible] 190

De iiii pesonibus quorum pondus erat libra [illegible]

[illegible] 40 [illegible] libra una [illegible] 1 [illegible] 3 [illegible] 1 [illegible] 9 [illegible] 1 [illegible] 27 [illegible] 40 [illegible] 1 [illegible] 40 [illegible] 14 [illegible] 9 [illegible] 3 [illegible] 16 [illegible] 27 [illegible] 3 [illegible] 1 [illegible] 31 [illegible] 9 [illegible] 9 [illegible] 31 [illegible] 81 [illegible] 121 [illegible]

De homine qui habebat sifphos quinque argenti.

240	288	432	480
$\frac{1}{6}$	$\frac{1}{4}$	$\frac{3}{10}$	$\frac{1}{3}$
	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{21}$
360	360	360	360
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$

Quidam dabat cuidam pro suo opere cotidie marchas argenti 1 quas solvebat cum ci-
phis quinque quos habebat ita quod non frangebatur aliquis eorum et hec fuit dies 30 pondus
primi ciphi fuit 1 cuius duplum s. marche 2 fuit pondus secundi pondus quidem
tercii fuit 4 s. duplum secundi. Pondus autem quarti fuit duplum tercii s. 8 quorum
ponderibus iiii. ciphorum ipsum iunctis faciunt marchas 15 quibus extractis ex ma-
nus 30 remanent marche 15 pro pondere quinti ciphi in primo quidem die de-
dit ei primum vas in secundo recepit ab eo ipsum primum et dedit ei secundum in tercio reddidit
dominus operario ipsum primum in quarto die recepit dominus ab operario primum et secundum et dedit
ei tercium et sic predicto ordine persolvit eum cotidie usque in diebus 30 poma

De duobus hominibus qui habuerunt

Ex duobus hominibus unus habuit poma 10
alius 30 et cum essent ambo in uno foro unusquisque vendidit ex suis pomis nescio
quot sed pretium eorum fuit idem et cum venissent in alio foro vendiderunt reliqua sub eodem
pretio. et fuit illud quod habuit primus ex suis 10 pomis quartam illud quod habuit secundus
quidem pretium pomi in unoquoque foro. Sunt et quot fuerunt poma unicuique vendita
in quolibet foro. Numerum quidem pomorum primi hominis s. 10 [illegible]
quod extracta prima parte ex numero pomorum alterius s. de 30 remanent [illegible]
[illegible] divisa per secundam partem et quod ex divisione pervenerit [illegible]
pomi venditi in secundo foro. Et quia de semel 30 extrahitur semel primum [illegible]
erit semel dicitur 1 pretium unicuique pomi venditi in primo foro [illegible]
10 divisa in 6 et 4 et extrahantur 6 de 30 remanent 24 quod divide
per secundam partem scilicet per 4 venient 6 pro pretio pomi venditi in secundo foro [illegible] 6 = elic hoc quod pretium pomorum primi
poma utriusque fori [illegible] 6 [illegible] pomis primi hominis ven- fori fuit dicitur 1 et secundi fori
ditis in primo foro [illegible] 30 et [illegible] fuit dicitur 6
erunt poma primi hominis vendita in primo foro. Et si vis quod primus homo vendiderit
pomum [illegible] in primo foro extrahe ipsum de 6 remanent 4 et tot poma
vendidit [illegible] in secundo foro. quibus extractis de 30 remanent pro pomis vendi- 24 =
tis in primo foro [illegible] homine et sic unusquisque [illegible] 44 [illegible]
poma 4 vendit primus homo in primo foro extrahe ei de 6 [illegible]
net 1 [illegible] vendidit in secundo foro 29 [illegible] reliqua
habuit unusquisque dicitur 34 et si vis quod unusquisque habuit [illegible] 44 extrahe 34
de 44 remanent 20 quod divide per 4 que sunt a pomo uno primi hominis [illegible]
in 4 [illegible] venient 4 et tot dicitur minuentur de 44 si addideris unum [illegible]
secundum ipsum quod possumus primum hominem vendidisse in primo foro [illegible]
4 divide dictum pomorum quod est 44 in 44 [illegible] 2 [illegible]
cum 1 predicto quod extraximus de 6 [illegible] 3 et tot poma vendit primus
in primo foro. de quibus habuit dicitur 3 reliqua s. 7 vendit in secundo foro ex quibus
habuit dicitur 42 et sic habuit dicitur 44 [illegible] 3 de 6 remanent
3 et tot poma vendit secundus [illegible] 18 reliqua
s. 27 vendidit in primo [illegible] 27 et [illegible] 44

Et si ponat q̄ sūma diuꝛ unicuiq; sit miꝛ nūo pomoꝛ fi. et duplicabis ip̄m ul' p. alīq; nūm mlcabis don̄ puer̄at nūl qui sit maiꝛ nūo pomoꝛ sedi 7 miꝛ sūme diffinitoīs maiꝛis. sīl diffinitone maioꝛē dicim̄. q̄m p̄mꝰ hō uendidit unū tm̄ pomū i uilloꝛ foꝛo. In qui sūma supꝛ hūim̄ dr̄ 44 7 t̄e sm̄ ei q̄ dimittim̄ gsolabis ne dimone coꝛ i tpo nūo. q̄ teo. duodes p̄ma utriusq; foꝛi p nūm i q̄ mlcaueris sūmā q̄sitā 7 habis ꝓpositū. Vbi gr̄a. ꝓe unūquēq; hūis se ex suis pomis dr̄ 20 quib' duplicatis faciūt. 40 g̃ uolo gsolare poma sīa uta ut unūq̄sq; hāt dr̄ 40 ex suis pomis. Duodes g̃ diffinim q̄ē a 40 i 44 .s. 14 p diffinim q̄ē a p̄mo p̄mi foꝛi i p̄mo foꝛo pomi
ū si. s. p 4 eribꝰ 2 quib' additis sī pom maioꝛis diffinitoīs. s. si
1 faciūt 41 ex tot poma uendidit p̄mꝰ i p̄mo foꝛo. q̄b' extractis de p̄ma p̄te duodi decenarij. s. 6 rem̄et 2 7 tot poma uendidit si i 2o foꝛo. Et q̄ duplicasti 20 duodes p̄ma uni pomi utriusq; foꝛi p 2 .s. 1 et 6 eribꝰ p p̄mo p̄mi foꝛi ½ uni dr̄ij. 7 p p̄mo si dr̄ij 2 Et si uis sūmā diuꝛ ꝛpoꝛ ascendē sī maioꝛē diffinitone .s. sī 44 duplicabis ip̄m diffinitonē ul' tplicabis. ul' p alīq; nūm mlcabis don̄ puer̄at nūl maioꝛ q̄sita sūma. 7 t̄e si hundāta q̄ē it ei duode p diffim q̄ē me p̄ma. 7 q̄ puenerit duode p nūm i q̄ mlcaueris dcam diffinitonē 7 habis illud q̄ debes addere si nūm pomoꝛ p̄mi hōis i p̄mo foꝛo. 7 mlcabis p̄ma utriusq; foꝛi p eūdem nūm i q̄ mlcasti maioꝛē diffinitonē. Vbi g̃. ponam̄ ut uicp ꝛpoꝛ hāt ex suis pomis dr̄ 100 Et mlcabis 44 p 2 erit 110 de q̄bꝫ extrahe 100 rem̄et 10 q̄ duode p diffim p̄mo. s. p 4 eribꝰ 2 q̄ duode p 2 i q̄b' mlcasti 44 eribꝰ 1 q̄ adde si' pom unū q̄ p̄mꝰ uendidit i p̄mo foꝛo erūt poma 2 uenditi i tpo foꝛo. s. eliq̄ 8 erūt uēdita i 2o foꝛo. Et q̄ mlcasti 44 p 2 mlca p̄mū utriusq; foꝛi p 2 7 habis dr̄ 2 p p̄mo p̄mi foꝛi. 7 dr̄ 12 p p̄mo si. Vbi g̃ ex duob' pomis hūit p̄mꝰ hō i p̄mo dr̄ 41 7 de reliq̄s 8 i 2o hūit dr̄ 96 7 sic hūit dr̄ 100 ex decē pomis. Dein ut hāt diuisionē pomoꝛ si utriusq; foꝛi abice poma 2 p̄mi hōis ex pomis 6 .s. ex p̄ma parte quā supꝛ de 10 fecim̄. nā tm̄ pars 2 sūma pomoꝛ uēdita a p̄mo hōie i p̄mo foꝛo 7 a 2o hōie i 2o. remanebūt poma 41 de q̄b' hūit s. dcī i 2o foꝛo dr̄ 18 et de reliq̄s pomis hūit i p̄mo foꝛo dr̄ 92 7 sic 26
hūit dr̄ 100 ex oīb' suis pomis.

Potes ꝛaho in ad hmōi quāhbz sūmā diuꝛ ꝓcedē eū solidata erūt po
ma utriusq; i alīq; diuꝛ nūo. q̄ eīt sic nūs ille ad sūmā q̄sitā ita p̄tū
inuētū uniuscuiq; foꝛi ad p̄tū q̄sitū eidē. Vbi g̃. ponam̄ unūquēq; ha

buisse dr̃ 7 o er suis pomis. q. sup̃ī ī mūon dissmicõe hūi dr̃ xy
7 poma p̃mi hõis fuer̃ diuisa ī 4 et 4 fi ī xo et 1 eit
uaq; fiẽ xy ad 7 o ut 1 .s. iuẽtū p̃tū fi fori ad p̃tū q̃stū eidẽ. p̃mi
7 fiẽ xy ad 7 o ut 6 .s. iuẽtū p̃tū fi fori ad q̃stū p̃tū eidẽ. q̃r
mlcabis 7 o p iuẽtū p̃tū. s. p 1 7 p 6 7 duidet utrũq; mlcatõnẽ
p xy 7 hebis p p̃tio p̃mi fori dr̃ x 7 p p̃tio fi dr̃ 12 7 diuisio po
moꝝ erit eidẽ. sc̃ā p̃mi ī p̃mo foro ex pomis 4 hūit dr̃ 10 7 ex ah
s 4 hūit ī fo dr̃ 60 7 sic hūit dr̃ 70 ex suis pomis ut q̃retur̃ to
tidẽ 7 hūit fi ex pomis xo uẽdit ī p̃mo foro. 7 ex pomo 1 uẽdito ī
fo. sc̃r ut hec que dc̃a sũ melius elucidet. hãt p̃mi hõ poma 12 fi xx et
hãnt ut dcim ẽ equalr p uendicionẽ pomoꝝ ī utrũq; foro. 7 uolo tm
ut p̃tū p̃mi fori sit dr̃ 1 duidet 12 ī duas ut libet p̃tes 7 has
p̃mã p suma pomoꝝ q̃ p̃mi uendidit ī p̃mo foro 7 sedt ī fo 7 a
bice eã de nũo pomoꝝ sedi hõis. s. de xx reliduũ q; remãsit di
uide p fã partẽ. 7 q; puenerit erit p̃tū unī pomi uendita ī fo foro.
dcim acc̃. q̃tus poma ex p̃dca p̃ma parte 7 has et p pomis uẽdit
a p̃mo hõie ī p̃mo foro. 7 q ex ipa pte remãserit. has p pomis uẽdi
tis a p̃mo hõie ī p̃mo foro 7 q ex ipa parte remãserit has p pomis uẽ
dtis a fo ī fo foro. vbi g. sit p̃ma pars 8 fa r 7 auferẽtr 8 de xx
remanẽt x r q̃b; diuisis p fã pãtẽ. uẽient dr̃ 6 p p̃tio fi fori dcim
diuide 8 ī duas qualescũq; pãtes ut dicamꝰ ī 4 et x 7 has poma 4
p eis q̃ p̃mi uẽdidit ī p̃mo foro. reliq; x uẽdidit fi ī fo foro q̃b; ex
tẽtis ex pomis eoꝝ remanẽt poma 7 p eis q̃ p̃mi uendidit ī fo
foro et xy p eis q̃ uendidit fi ī p̃mo. 7 sic p̃mi hũit dr̃ 4 ex po
mis 4 et dr̃ r x ex pomis 7 7 sic hũit ī sũma dr̃ r 7 totidẽ hãt
fi ex pomis xy 7 ex pomis x ul duidat̃ 12 in 7 et 4 et aufe
rant̃ 7 de xx et reliq; x 4 diuide p 4 7 hebis dr̃ 4 p p̃tio p
mi fori 7 diuide 7 ī quales cũq; pãtes 7 has unã partẽ p̃tio hõis p̃mi
hõis p̃mi fori. 7 alã p pomis fi fori fi hõis. 7 si uis q; p̃tū p̃mi fo
ri sit alĩ nũs dr̃oꝝ qualẽcũq. eit diuisio pomoꝝ eidẽ. sz̃ p̃tū fi
fori erit p̃portionalr uidelz fiẽ 1 ẽ ad mũm illã ut p̃tū iuentū
fi fori ad p̃tū q̃stū eidẽ fori. vbi g. ut si uis ualere pomi dr̃ x
ī p̃mo foro. q; x plũ sẽ de 1 sc̃ triplica p̃tū fi fori 7 sic hebis ī p
ma diuisionẽ drij 18 p p̃tio fi fori 7 dr̃ 14 ī fa diuisionẽ. et si
p̃portr p̃mi hũisse ex pomis 17 aliq; multiplr dr̃oꝝ fi ut dcim duplũ
iuẽtus sũmã quã uolũis equalẽ quã hãt unusq; ex suis pomis sm mo
dũ p̃dcm. ut ut poma fi fori crescãt duplũ pomoꝝ fi fori fi hõis.
7 sẽ de pomis fi fori p̃mi hõis. abice duplũ pomoꝝ fi fori fi has

et quod residuum fuerit sua. et per predicto duplo duplica predictam summam. de qua dupli-
catione abice ipsam summam hoc est multa ipsam summam per 1 s. per unum minus
de 2 propter duplum predictum et quod provenerit divide per suam residuum. et quod ex di-
visione provenerit. adde super pretium sui fori. et habebis propositum. Ubi igitur sunt poma
6 primi hominis in primo foro et reliqua 6 in secundo et pretium primi sit 1 sui 4 et sic
habebit ipse dicitur 36 in summa quam habebit secundus ex pomis 31 in primo foro et
ex pomo 1 in secundo. Abice igitur duplum ipsius pomi de pomis sui fori primi hominis
s. de 6 remanent 4 in quibus divide multiplicationem de 1 in 36 exibunt 9 que
adde super pretium sui fori erunt 14 et tot vendiderunt pomum in secundo foro et sic habuit
primus dicitur 90 sui 45 Et si vis primum habere triplum dictorum sui. abice ex predictis 6
triplum unius pomi quod secundus vendidit in secundo foro. remanent 3 in quibus divide multiplica-
tionem de 2 in 36 quod extracto 1 de 3 propter triplum remanent 2 exibunt 24 quibus
additis super 4 s. super pretium secundi fori erunt 29. et tot valuit pomum in secundo foro
et sic primus habuit dicitur 6 ex pomis 6 et dicitur 174 et reliquis hoc est in summa
dicitur 180 tertia pars quorum habuit secundus ex pomis 31 primi fori et ex pomo
uno secundi. Et si vis pretium secundi excedere pretium primi in aliqua multiplica-
tione [illegible] in quadruplo [illegible] ordine eodem summam ipsorum equalem sui
aliquam divisionem pomorum ipsorum. et tunc per quod duplo accipe $\frac{1}{4}$ ex numero pomorum
[illegible] fori primi hominis. et residuum sua in quo divide summa dictorum ipsorum quarta
[illegible] hoc est per dictum residuum divide $\frac{3}{4}$ ipsius summe. et quod ex divisione
[illegible] abice ex pretio [illegible] sui fori. et quod residuum fuerit. erit quesitum pretium
[illegible] Ubi igitur dicitur 6 poma primi fori et 6 sui ex pomis primi hominis
et pretium [illegible] pomi in primo foro sit 1 in secundo 11 Quare poma secundi hominis primi
fori sunt 28 sui 4 et summa dictorum unicuique est 72 accipe igitur $\frac{1}{4}$ de 4 s.
1 et extrahe eam de pomis 6 secundi fori primi hominis remanebunt 5 in quibus
divide $\frac{3}{4}$ de 72 s. 54 exibunt $\frac{4}{5}$ 10 que extrahe ex 11 s. ex pretio secundi
fori remanent $\frac{1}{5}$ et tot valuit pomum in secundo foro cum pretium primi fori sit 1
[illegible] multa utriusque pretium per 5 et habebis 5 pro pretio p-
[illegible] 1 [illegible] et sic habuit primus ex suis pomis [illegible] 3 secundi sol 12 s.
[illegible] duplum [illegible]

Modus alius in quo pomorum

R[illegible] pomorum utriusque fori et sic pretium [illegible]
[illegible] fori [illegible] cognoscat [illegible] poterit solui
[illegible] pomorum et maius pretium per minorem mul-
tiplicationem [illegible] solubilis erit quesitio. et tunc
[illegible] extrahe diffinitum quod est [illegible]
[illegible] remaneat. quod re-
[illegible] pomis secundi fori ve-
[illegible] de predicto residuo. [illegible]
[illegible] primi [illegible] in primo foro. Ubi igitur dicitur iterum poma

si fori si hominis quod extrahe ex numero pomorum

[illegible]

Regula notabilis de 4 numeris ignotis reperiendis

[illegible]

6462

48 $\frac{2}{3}$ $\frac{4}{9}$ $\frac{5}{16}$ $\frac{6}{25}$

7740

359

$\frac{2}{3}$ $\frac{4}{9}$ $\frac{5}{16}$ $\frac{6}{25}$ $\frac{4}{9}$ $\frac{2}{3}$

430

de q̄b⁹ ertnlie mlcmonē de ℔ ℥ o ſeruatſ ſub ℥ ℥ ī 6 q̄ ſē ſē ℥ ſ. ℥ 480
remanēt 6 ℥ 04 q̄ mlcia p ℈ erē ℈ 7444 de quib⁹ ertnlie mlcmonē de
℥ 480 ī ℔ q̄ ſē ſē ℈ ℔ 10 ℥ 20 remanēt ℔ ℥ ℥ 24 q̄ mlcia p ℥ erē
1 ℔ 1704 de quib⁹ ertnlie mlcmonē de 10 ℥ 20 ī ℥ q̄ ſē ſē ℥ ſ. ℥ 0 ℔ 0.
remanēt 1 ℥ 1064 de q̄b⁹ ℈ ertnlie mlcmonē de ℥ 4 ℈ ī 6 q̄ ſē ſē ℥ 4
quā ī ℔ que ſē ſē ℈ quā ī 4 ſ. q̄uētū de ℥ et ℥ quox mlcmo
nū ſūma ē ℔ ℥ 080 remanēt 7 ℈ 94 q̄ ſē ℔ l n̄. Sz ut hac tpīn 7 ꝑm n̄ m ī
mīoꝛib⁹ nūl dmde utcūq p ℈ 7 hebis ꝑm n̄ m ℔ 7 ℥ 0 sedm 8 6 0 4 dem
ut īueīam ꝑcū n̄ m lcia ꝑm nūm. ſ. ℔ 7 ℥ 0 p ℥ 4 ℈ 7 ſm p 8 6 7 9 mūe
tū er hiſ duab⁹ mlcmoīb⁹ dmde p ℔ ℥ 0 erīb⁹ 4 6 8 7 erq̄ꝫ tū nūoꝛ
ſūma acē ℥ ℥ 7 hebis p q̄ſto nūo 1 ℥ 718 q̄ addto ē ꝑcio nūo 7 cū ꝑmo
7 de coꝛ ſūma acceptus ℈ ℥ reddēt p q̄nto nūo 10 ℥ 80 Incipit ꝑcs
vm aī q̄ſ nūm aliq̄ poſuīt ℈ ℥ deami capitli d̄ quibꝫdā dūinationibus
ī coꝛde ſuo 7 uoluīt ut illū īueīat. ꝑcepit ut ponat dimidiū tpī nūi ſ.
tpīn nūm. 7 ſi aliq̄ ruptu medietat geumerit. ꝑcepit ut faciat ī nūe
gtū. Cū totū nūi medietatē ponat nūm ſtpīn nūm. 7 ſi aliq̄ medie
tat geumerit. nūm ī integrū reſtituat. Deīn mīrogt eū ſi er ſūma quā
hȳ pōt ꝺare ℈ Ert tu p quolibz ℈ retineat tacite ī coꝺe tuo ℔
7 cōſideret ſi ī ꝑma poſitiōe eū poſuit dimidiū nūi ſē nūm fuīt fruc
tu medietat. 7 retine ī mānū 1 ſi ī ſa. retine ℥ Ert ſi ī utcūq ſtuctū ſu
erit. retine ℥ Ert ſūmā quā er q̄nauſ collegerit. adde eū dēi unitate
ul eū bnario ſ ternario 7 hebis ꝓpoſitū nūm. Vbi ℊ. ponat q poſuīt ī coꝺe
ſuo 1 ſē q ſi poſuīt dimidiū tpī erit unū 7 dimidiū. erq̄ dimidio ſi
fecerit 1 erē ℥ Ert tu p tpō dimidio retine ī mānū 1 ſ. ut ſū
ſi poſuīt dimidiū tpōꝛ ℥ ſē tpa ℥ erē ℥ 7 q̄b⁹ eū n̄ geumur ſuo
tu medietat. 7 q n̄ in pōt ꝺare ℈ cogīcet q tpe tm poſuit ī coꝺe
ſuo. Vbi ſi ī utraq poſitiōe ruptū ueīret. 7 ℈ in ꝺare ſi poſſ. cogī
cerel q tpe ī coꝺe ℥ poſuiſſ. De eodem
te ponat q poſuiſſ ī coꝺe ſuo 10 ſē q ſi poſuīt dimidiū tpōꝛ q ē 4
fuīt 14 7 quo nūo eū n̄ ſit mediū ſtuctū ſi ſtuddideric dimidiū tpī ſ.
℔ 7 erē ℔ ℥ erq̄ ℔ ſi fecerit 1 erē ℥ ℥ Ert tu p ℔ eū ſit ī ſa tu
ce retine ℥ Ert q de ℥ ℥ n̄ pōt ꝺare nouenariū n̄ bis. retine bis ℔
p tpīs duob⁹ 7 ſic facel q 10 poſuit ī coꝺe ſuo.
te ponat q ī utrūq poſitiōe ſtuctio nūi ſit. p q̄b⁹ ſtuctiōib⁹ ſuab ℥ 7
ponat q er ſūma quā ī fine hūit. poſſit ꝺare quat ℈ p quib⁹ retine
bis quat ℔ .x. 16 7 te cogīcet q poſuit ī coꝺe ſuo 14 Jte alia d̄ eode
vlupiceī nūm que tpe ī ſuo coꝺe poſuit p ℥ 7 ſūmā dmdat p ℥
7 ſi ī tpa dmſione ruptu medietas fuīt. eiciat eā. 7 reſiduū tphoet
unū. 7 ſūmā p ℥ dmdat. Ert ſi ſtuctu medietat fuīt ubi eiciat eī.

7 ſem ℈ er etiam q̄cūq
ubi pōt ꝺare. ℈

unū

ertogitat ℈
14

q̄ quens, dare poterit ꝫ ꝑ quolibꝫ ꝫ retine 1ᵉ 7 si tm̄ i ꝑma diuisione fuit rupea medietat. retine i mā̄u z et si i sa z si i utrūq; 1. 7 hebis nūm erogniatū. De eodē cū nūl erogniatus nō sit ultra 104

Quidat erogniatū nūm ꝑ z 7ꝑ 4 7ꝑ 7 7 sēp itroga q̄ er unaqq; diuisōne sit fuit. Tu ū er unaquaq; unitate q̄ er diuisione quarti sit fuit retine 70 7ꝑ unaquaq; unitate q̄ er diuisōe septenarij sit fuit. retine 14 Et q̄uens nūl sit erecte uit t ulē 104 eiciat ii 104 7q t rem̄ sent. erit erogniand nūl. Vbi g. ponat q̄ er diuisione quarti remaneāt z ꝑ quib⁹ retineat bis septuagies. 1. 140 de q̄b⁹ volle 104 remanēb t z4 Et er diuisōne quarti rem̄ēt z ꝑ q̄b⁹ retine t 21. 67 q̄ adde ē ꝑdēs z4 erūt 98 Et er diuisōe septenarij rem̄ent ꝑ q̄b⁹ quat 14 retinebis. 1. 60 q̄ adde cū 98 ꝑdēs erūt 148 ex q̄b⁹ eice 104 rem̄ebt t 47 q̄ erāt erogniand nūl.

Accedit t er hac regla pulcra. diuinatio undeiz ut si q̄s tē noūit hāc regulā 7 alīq̄s ei ꝑuat dīrit aliq̄ nūm. te ille tu cōsoci nō interrogit mentē tacite diuidat nūm s dem ꝑ z 7ꝑ 4 7ꝑ 7 ꝑdēm tē. 7q er q̄libet diuisōne remāserit ꝑ ordinē t dicat. 7 sic ꝑcis scit nūm sibi ꝑuat dem.

nūs 47

Alit De eodē cū nūl nō ascendat ultra z14.

Precipe ut nūm quē i cōde tuo ponit diuidat ꝑ 4 7ꝑ 7 7ꝑ 7 ad modū p̄cedētis regule. 7 singulariter itroga q̄d er unaquaq; diuisione remaneat. 7ꝑ unaquaq; unitate q̄ er diuisione quarti remāserit retine 126 7ꝑ q̄libz unitate er septenario rem̄ēte z z 4 7ꝑ q̄libz er nouenario z 80 7 sēp cū sūma exierit ita ut possit tm̄ exire here z14 eice ei tm̄ q̄uenscūq; poteris. 7q t i fine remāserit. erit q̄sit nūl.

Aliter de eodem

Precipe ut dupliet nūm erogniatū 7 dupliato addat 4 q totū ml̄ det ꝑ 4 7 ml̄ato sūme addat 10 quo addito ml̄ det totū q huīt ꝑ 10 7 itroga eū q̄t hāt. 7 er hec q ipe huīt tacite i cōde tuo erithe z40 7 q̄t cētenaria t sit fuīt. tot unitates i cōde tuo ꝓponit. 7 si alīq̄s nūl t sit fuīt q̄ sit mio. 100 q̄sidem er eo q̄ pars sit unī cētenarij q̄ tal pars unī itrogt t ipa itrogata q̄ er cētenarijs collegeris. ꝓponit ipe in cōde suo. 7 ei ad hec ꝑfect posse dare decimas. istā ad ꝑfect sufficiāt. Cum at q̄libet tres tarillos precesserit. 7 nolūs ut dicat pūctū q̄ t q̄libz tarillo grauet. ꝑcipe ei ut dupliet pūctū unī tarilli 7 dupliato q̄ tunc sit addat 4 q totū ml̄ det ꝑ 4 et sit addat 10 nūo 7 pūctū alt tarilli. q totū ml̄ det ꝑ 10 7 ml̄atō pūctū alt tarilli sit addat 7 sic dicat t q̄t hāt. q cū seueris erithe iii. 7 z40 7 q̄t cētenaria t remebit tot pūcta i ꝑmo tarillo grauet. 7 q̄t decime tot pūcta erūt i alio tarillo. 7 q̄t unitates tot i alio. De anulo repēdo

De quot nummis tarilli constent

Cum autem quotiens homines congregati sint et aliquis eorum occultatum habuerit anulum in aliquo di-
gito manuum vel in aliquo nodo et volueris scire quis eorum habuerit per dictam regulam
taxillorum tibi demonstro hoc invenire. Primum quidem iube ut sedeant omnes in ordine
et unum eorum qui plus sciat de numero dic ut numeret a se usque ad eum qui habet anu-
lum quem numerum duplicare facito et superaddere 4 et multiplicare per 4 deinde sub-
addat numerum digitorum. Hoc est si habuerit eum in auriculari digito sinistre manus
addat 1 si in anulari 2 si in medio 3 si in indice 4 si in pollice eiusdem
manus 5 si in auriculari dextere manus 6 si in anulari 7 si in medio 8 si in in-
dice 9 si in pollice 10 quam summam totam multiplicet per 10 et multiplicationi superaddat
numerum nodorum. Hoc est si habuerit eum inter primum nodum et secundum addat 1 si inter secundum
et tertium 2 si inter tertium et extremitatem unguis 3 Et sic dicat tibi totam summam ex
qua eum extraxeris 350 centenaria que remanebunt dabunt tibi numerum hominum qui sunt ab
ipso qui multiplicat usque ad ipsum qui habet anulum computato videlicet utroque. Decene
vero que sunt similiter dabunt tibi numerum digitorum computando videlicet ab auriculari digi-
to sinistre manus ut supradictum est. Unitates vero dabunt tibi numerum nodorum digiti
in quo sunt anulus

Nam si in aliqua parte corporis ipsum anulum occultare voluerit et volueris scire quis
eorum habuerit et in qua parte sui corporis oportet primum distinguere hominem in 100 pa-
rtes ex quibus decem partes sunt digiti manuum ut supra dicimus digiti vero pe-
dum [illegible] 10 [illegible] 20 Pars vero vigesime prima est superior pars
pedis sinistri sexta digitorum. Planta eiusdem est pars vigesima secunda. Superior pars pe-
dis dextri circa digitos vigesima tertia. Planta eiusdem vigesima quarta. Super pedem
sinistrum vero pars coniungitur cruri vigesima quinta. Sub calcaneo eiusdem pedis vige-
sima sexta. Super pedem dextrum vero pars coniungitur cruri vigesima septima. Sub dex-
tro calcaneo vigesimum octavum. Exterior nodus sinistri pedis vigesima nona. In-
terior trigesima. Exterior pars dextri pedis trigesima prima. Interior trigesima secunda.
Exterior pars dextri cruris 34 Interior 36 Exterior pars sinistri genicli 37
Interior 38 Exterior dextri 39 Interior 40 Exterior pars coxie sinistre 41 In-
terior 42 Exterior pars dextri 43 Interior 44 In anca sinistra sub brachario
vel supra 45 Super pectinem 46 In anca dextra circa brachiarium 47 In re-
nibus circa brachiarium 48 Circa posteriorem coxam 49 Circa virilia 50
In [illegible] sinistra sub cingulo [illegible] 51 Umbilicus 52 Dextri flancus [illegible]
vel circa cingulum 53 Interior circa cingulum 54 Sub ascella sinistra 55 Pectus
56 Ascella dextra 57 Inter spatulas 58 Inter collum et humerum sinistrum
vel circa collum [illegible] 59 Tercula [illegible] guttur 60 In dextra
parte circa collum vel humerum 61 Dextri circa collum nodum 62 Inter cubitum et hu-
merum exterior sinistri brachii 63 Interior 64 Exterior dextri 65 Interior
66 Exterior pars cubiti sinistri 67 Interior 68 Exterior dextri 69 In-
terior 70 Inter cubitum et manum sinistram exterior pars 71 Interior 72

sinistri cruris trigesimi tercia
Interior trigesimi quarta. Exterior pars

[illegible] 73 [illegible] 74 [illegible] 75 [illegible]
[illegible] 76 [illegible] 77 [illegible] 78 In dorso manus sinistre
79 In manu eadem 80 In dorso dextre manus 81 In eadem manu 82 In ore
83 Laris sinistra 84 dextra 85 Auris sinistra 86 dextra 87 Post
aurem sinistram 88 Post aurem dextram 89 [illegible] pilos 90 [illegible]
[illegible] colli 91 [illegible] 92 [illegible] sinistrum 93 [illegible]
[illegible] 94 [illegible] genu sinistrum 95 Subtus 96 [illegible] dextrum 97 Subtus 98
[illegible] sinistra 99 Sub dextra 100 [illegible] cognitis [illegible]
[illegible] signa [illegible]
[illegible] 10
[illegible] 10 [illegible] 5 [illegible] 5 [illegible]
[illegible] 10
[illegible] 5250 [illegible]
[illegible] 10 [illegible]
[illegible] 100 [illegible]
[illegible] ad 100. De diuisione cuiuslibet numeri in duas partes

[illegible] 10 [illegible] 3 [illegible]
[illegible] 7 [illegible] 10 [illegible] 76 [illegible]
[illegible] 110 [illegible] 10 [illegible] 11 [illegible] 34 [illegible] 1 [illegible] 10
[illegible] 9 [illegible] 3 [illegible] 7 [illegible] 10 [illegible]

Aliter de eodem.

[illegible] numerum minorem diuiso numero
[illegible] quod totum in unum [illegible] distantia
[illegible] tuo collegeris [illegible] diuisi
[illegible] numerum [illegible]
[illegible] 2 [illegible] 4
[illegible] 3 [illegible] intelligo de
[illegible] ad libi
[illegible] De diuisione alicuius numeri in tres partes

Si q̄s diuiserit aliquē nūm̄ in tres partes / uoluīt q̄s partes inuēire. ad
discē diuisū nūm̄ ab eo / fac ut mlcet p 2 una qualē uoluīt pārē.
alia ū mlcet p 1 min̄ nūo diuiso. Alia ad mlcet p ipm nūm̄ diui
sū / addat q̄s mlcationes in unū. nūm̄ tacte mlca nūm̄ diuisū in se
ipm. quo mlcato. fiudde / qualē uoluīt nūm̄. / et fiūma qua huīt dic
ut eruhat fiūmā fuā. / dicat ē residuū. et q̄ residuo tacte eruhe
nūm̄ quē mlcatōi tue aduīrsū. reliquū ū diuide p 2 min̄ nūo
diuiso. / q̄ et diuisone euenerit. eīt p̄ma pars q ū remāserit. eīt
alia. q̄b duab⁹ partib⁹ in unū collectis. si eas et nūo diuiso eruerit
ea in ē partē de mō stubē.

Hē mlcet una pārē ut p̄dictum p 2 alia ū mlcet p qualē uoluīt
nūm̄ qui sit maior nūo diuiso. ea ū pārē mlcet p 1 plus nūo p
quē mlcauit sa pārē. et hys tb⁹ mlcationib⁹ faciat unā fiūmā qua dic
ut eruhat et nūo q̄ tu colligeris et nūo diuiso mlcato in nūm̄ p quē
ipē mlcauit ea pārē. residuū ū eū dixīt ē diuide secrete p 2 mi
nū nūo p quē mlcare feceris ea pārē. / hec fiet q̄ p̄ma pars mlcati
fuit p 2 Vñ si mlcauerit p 2 diuideris ipm residuū p 2 min̄ nūo
sto. / hoc intelligat si mlcauerit p aliq̄ aliū nūm̄. / q̄ et diuisioē eruerit
eīt p̄ma pārs. / q̄ et diuisione remāserit. eīt sa. ea ū pārē q̄lib⁹ p
inuēire. Potes ē p hāc duas regulas p̄cta tu tuas inuēire. si scieris
fiūmā eōrū p̄ctorū.

Et si aliq̄s diuiserit aliq̄ nūm̄ in. uij. partes q̄s partes tu inuēire desi
das. addisces p̄m ipm nūm̄ ab eo. / pcipe ut fiūmā p̄me partis / se /
ea. addat cū fiūma se / ea / q̄rte. / cū fiūma ea / q̄rte / p̄me partis
/ dicat ē fiūmā quā secrete eruhe et mlcatōe diuisi nūi in 2 / q̄
remanebit eruhe de diuiso nūo. residuū ū eīt una pars. s. ea.
Q ua inuēta. reliq̄s tres pārtes p sua regla studeas inuēire.

Hē si in q̄nq̄ partes q̄s aliq̄ nūm̄ diuiserit. pcipe ut addat nūm. uij.
partiū p ordinē. uidelicē p̄me / se / ea / q̄rte / q̄nte. / cū nūo ea
/ q̄rte / q̄nte / p̄me. / cū nūo q̄rte / q̄nte / p̄me / se. / dicat ē fiūmā
quā eruhe secrete et quadripheatōe diuisi nūi. residuū ū eruhe
de diuiso nūo / hebis una pārtiū. s. q̄rtā. et aliq̄s ū. uij. partes hebis
p suam regla studeas inuēire. hoc ē potes de pl⁹ pārtib⁹ opari.

Si tres hoīes fuīnt quor⁹ un⁹ habet aurū alt⁹ argētū alt⁹ stagnū. / uoluīt
scire q̄s eor⁹ habet aliq̄d eor⁹. dic aliq̄s alt⁹ ut⁹ un⁹ eor⁹ q̄ faciat sm q̄d
dixīt ei. / et da um illor⁹ tri 1 / alio 2 / alio 3 / et pcipe ut duplicet
nūm̄ q̄ dedisti illi q̄ hē aurū. / nūm̄ q̄ dedisti illi q̄ hē argētū mlcet
p 3 / reliquū ū nūm̄ mlcet p 10 / addat eas duas mlcatōes cū du
pheatōe sua. / dic ut eruhat fiūmā de 60 / q̄ q̄d fi fuīt. dicat ē /

cū nūo se ea tue er q̄rte

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tu diuide ipm supstuū p 8 7 tu cui dedisti hꝫ nūm q̄ ex diuisōe exierit. ille hē aurū. 7 dedisti hoc q̄ ex diuisōne remāserit. ille hē argētū. reli quus ū hē stagnū.

Hē da uni eox duo alij ēt alij 4 ꝓcipe ut nūs illi q̄ hē aurū duplicet. nūs quoq; ipi q̄ hē argētū mlcet p 9 nūs illi q̄ hē stagnū. mlcet p 10 7 ītroga q̄d hē a sūma usq; ī 90 qđ cū scieris. diuide illud p 8 7 cui dedisti nūm q̄ ex diuisōe exierit. ille hē aurū. 7 cui dedisti nūm q̄ ex diuisōne remanserit. ille hē argentū. & eliq ū hē stagnū. & scias q̄ ī hac q̄stione ideo distinctā q̄rit q̄ ea sūma usq; ī 90 q̄ addunt tib nūs q̄s ei dare debeam. s. 2 et 2 et 4 faciūt 9 q̄ mlcauūs p 10 p ipa uidelz q̄b mlcauit nūm ipi q̄ hē stagnū. faciūt 90 ꝓpt eadē ū ī añcedēte q̄one q̄rit distinctā q̄ ea sūma quā hē usq; in 60 q̄ septies 10 faciūt 60 q̄ 60 colligūt ex coadunatione tū datox nūox. s. ex uno et 2 et 2 vū 7 alios nūos ꝓt hos ipis trib hoīb dare poteris si supdictax regl̄ decētā tenuē teneris. & nota q̄ unūq̄q; nūox datox op̄ē mus q̄ 8 cū ī 8 diuidē opa teat.

Hū ille q̄ hoc fecerit det ad libitū unū eox q̄ uoluīt. alij det aliq̄ nulli plꝰ ter̄o det pl⁹ so. 7 adat hos tres nūos illuc 7 dicat ē sūma q̄ nota est ꝓpe ut nūm quē dederit ei q̄ hē aurū duplicet. nūm ū q̄ illi q̄ hē argentū. mlcet p 1 minꝰ sūma tū datox nūox. q̄ nūm debeat ei denotare ut si q̄phendat. q̄s hoc faciat. & nūm quē dederit illi q̄ hē stagnū mlcet p ipe ipam sūmā. quā sūmā debeat ei illi denominare. preterū mlca ipam sūmā ī seipam. 7 sic nūs q̄ ex mlcatiōe p creuit. adde aliq̄ nūm ad libitū 7 ītroga eū q̄s hab a sūma hua usq; ad tuā. et ex hoc q̄ dixit ex tuā nūm quē ad libitū adiūxisti. & sidū ū diuide p 2 minꝰ nūo qui ex trib datus nūs peteat. q̄s q̄ ex diuisione exierit. erit nūs illi qui hē aurū. 7 q̄s ex diuisione sidū erit nūs illi qui hē argētū. q̄b duob nūis inest. adde eos illuc 7 ex tuā sūmā eox de sūma tū datox supdēox nūox. 7 q̄ remāserit erit nūs illi q̄ hē stagnū. q̄b trib nūis ꝓpet. & sidem ē eox tū hoīm deduct. maiorē. 7 ē mediocrē. 7 ē minorē. 7 sm illud poteris scire q̄s eox hē aurū. 7 q̄s argentū. 7 q̄s stagnū. cui regle si memoriā hūis. 7 de inuētōe 4 et 4 partiū nūox nō īmemō ex̄ueris poteris de 4 7 de 4 reb noticiā hīre.

Si aliq̄s posuīt ī corde suo aliq̄ nūm. faciat ei duplicare semel 7 bis 7 q̄tcūscūq; uoluīt ut ꝓ triplicare. ut p aliq̄ nūm mlcare. ex q̄b tū alijs ex̄tenoīb. addat noīb sm q̄ ipe demōstrabim. 7 uoluīt inuenire sūmā ī qua ipe accēderit. retine tu ī mēte. 1 et q̄cūq; ꝓpriet ei

fac de ipsa unitate ut si precepero ei quod duplicet vel triplicet tu duplica vel
triplica ipsam unitatem. Et cum hoc aliquotiens [illegible] fecerit prius precipe ut ipse addat
summe vel extrahat a summa numerum quem ipse in corde suo posuit semel vel bis
vel quotiens cumque voluerit et tu fac sibi de unitate tua. Et cum precipias ei ut divi-
dat totam summam quam habuit per numerum quem in corde suo posuit et tu scias quod ipse
habet tantum quantum tu habes in manu tua. Verbi gratia ponatur quod ipse cogitet 6 quem si
duplicaveris erit 12 et tu ex duplicata unitate habebis 2 unde si ipse
12 bis duplicaverit habebit 48 et tu si bis tantum quem habes ex duplicato 1
bis duplicaveris habebis 8 et si ipse [illegible] 48 triplicaverit habebit 144 et si
tu triplicaveris 8 habebis 24 et sic [illegible] duplicando vel
triplicando vel quadruplicando [illegible] que 144 si addiderit tibi numerum quem
ipse in corde suo posuit [illegible] 6 habebit 162 et si tu [illegible] 24 addideris tibi
ipsam unitatem habebis 27 et [illegible] 162 per numerum
quem in corde suo posuit [illegible] 6 habebit 27 sic tu habes. Unde si dixeris ei quod habet
27 [illegible]

Et hac [illegible] quedam [illegible] que [illegible] videlicet cum vo-
luerit [illegible] quem tu in corde suo posuit [illegible] aliqua [illegible]
debes ei [illegible] accipiat [illegible] et tu tene in
manu tua 1 et precipias [illegible] duplicet numerum quem accepit vel triplicet vel per ali-
[illegible] numerum [illegible] vel [illegible] quem ab ipso
accepit et tu [illegible] de unitate tua [illegible] hoc fiat donec
[illegible] unitate [illegible] numerum quem in corde posuit [illegible] dividat
numerum quem habet per numerum quem accepit [illegible] ex dividendo [illegible]
quem in corde posuit.

Incipit pars 9a de duplicatione scacherii et quodam alia regula

Duplicatio [illegible] scacherii [illegible] regula
[illegible]

ua [illegible]

[illegible] cat

4 [illegible] 4 [illegible] 1 [illegible]
[illegible] 1 [illegible] 2 [illegible] 3 [illegible] 4 [illegible] 1
[illegible] 4 [illegible] 16 [illegible]
[illegible] 4 [illegible] 1 [illegible] 2 [illegible]

tcio 4 in quarto 8 quibus insimul iunctis faciunt 14 que sunt 1 minus de 16 sunt 16
in se multa faciunt 256 que sunt 1 plus numero duplicationis dupli .iiij. punctorum
superscriptorum .s. de punctis 8 que primam scacherij optinent lineam. Ubi igitur in
primo est 1 in secundo 2 in tercio 4 in quarto 8 in quinto 16 in sexto 32 in
septimo 64 in octavo 128 quibus insimul iunctis faciunt 255 quorum
255 tota 256 sunt 1 plus numero predicimus quam multatis 256 in se faci
unt 65536 que sunt magis duplicatione dupli unius lineae de punctis 16
propter eamdem quam multa 65536 in se faciunt 4294967296 que sunt
sunt uno magis numero duplicationis dupli duarum linearum videlicet de punctis 32
que dimidium optinent scacherij. Unde multa 4294967296 in se
redde 18446744073709551616 que sunt 1 magis dupli
cationem totius scacherij quo numero in se ipso multato redde 1 magis duplica
tione duorum scacheriorum .s.

340 282 366 920 938 463 463 374 607 431 768 211 456

Et sic multando possemus procedere in infinitum sed cum numerus duplicationis scacherij
per multitudinem intelligi nequeat quia aliter apud intelligi possit per ostendere procu
ramus. Sumantur igitur 65536 qui colliguntur ex duplicatione duarum linearum .s.
16 punctorum et impleatur ex hijs arca una et eas cum ipsa arca duplicando
per ordinem. Et sic habebimus in septimo decimo puncto videlicet in primo puncto tercie
linee archas duas secundo eiusdem linee areas 4 in tercio 8 in quarto 16 in quinto 32
in sexto 64 in septimo 128 in ultimo eiusdem linee 256 in primo quarte linee
512 in secundo 1024 in tercio 2048 in quarto 4096 in quinto 8192 in
sexto 16384 in septimo 32768 in ultimo habebis areas 65536
ex quibus si unam impleverimus domum habebimus in primo puncto quinte linee domos
2 in secundo 4 in tercio 8 et sic duplicando per ordinem habebimus in ultimo puncto
sexte linee domos 65536 Ex quibus si unam fecerimus civitatem et per reli
qua puncta fuerimus duplicando habebimus in ultimo puncto scacherij civitates
65536 quod summa totius scacherij ascendit in civitatem 65536 ex
quibus unaquaque habet domos 65536 et in unaquaque domo sunt
65536 et in unaquaque arca sunt .b. 65536 [illegible] arca eorum
oportet habere .b. 1 minus supradicta demonstratione. [illegible]
scacherium duplicare volueris. et ex hijs quot [illegible] quarum una
quaque habet media 500 pisanos. quorum [illegible] 24 quorum
quolibet ponderat libras 140 quarum unaquaque [illegible] uncias 12 ex
in unaquaque uncia ponderat dictos 24 de cantaria [illegible]
carrubias 6 quarum unaquaque ponderat grana [illegible] 4 [illegible]
omnes sub quadam regula sic per ordinem 1 0 0 0 0 0 0
4 6 24 12 140 24 500
et numerum scacherij .s. 18446744073709551616 [illegible]
partes que sunt sub regula [illegible] 4 [illegible]

civitates
65536
domus
65536
arce
65536
bis
65536

7 q̄q̄d sup̄ 6 remāserit. erī̄ cumrubie 7 q̄q̄d sup̄ z 4 erī̄ dr̄ij de cātem
7 q̄q̄d sup̄ 1 z remāserit. erī̄ modia. nūs ū q̄ er duūsioē supaūt. eīt
nūs nauuī onerat ut hic ostēdit

z z o 6 114 tz 1tz
1t 6 z 4 1z 1t o z t 4 o o 1 7 z 4 o z 8 t t 4 q̄ nauuī nūs q̄ ifi
nitē 7 īmūbit sit sanus liq̄do h̄ deph̄endit. Et nota q̄ modia 4 o o unī
cuiq̄ nauis st̄ modia thalatia. s. de romania 1 6 o o o l' modia sorie
8 o o o l' salme siethe t o o o

Sēd ū duplicatio scacherij. s. eī q̄slibz sequētiū pūctor ōiū añcedētiū.
dupl) eē ꝓpōit dupl'r iueīri pōt. p̄m q̄dē ut de pūcto ī pūctū usq̄
ad finē nuāndo eal. Sēd ū mod' ē ut accipiat 1 q ꝓpōr ī p̄mo pūcto.
7 addat eī eī z q̄ ponūt in so erī̄ z q̄ z mlēa īse erī̄ 4 q̄ 4
st̄ nūs duplicatiōis p̄mi pūcti 7 er dupli st̄ pūcti. s. de pūctis tb'. Vbi g̃.
si ī p̄mo ponat 1 ſ so duo. ſ tcio 6 .s. duplū duor añcedētiū pūctor
sūma eor erit 4 ut p̄dixim'. q̄ 4 si īse mlēa fuerit 8 1 q̄ nūs ē
duplicatio p̄mi pūcti. 7 7 dupli duor sequētiū pūctor. s. de pūctis. Vbi g̃. 4
si ī p̄mo pūcto pōit 1 ſ so z ſ tcio 6 ſ q̄rto 18 ſ q̄nto 4 t mi
nuū ī 8 1 ascendēt q̄ si īse mlēa fuerit 6 4 6 1 q̄ nūs ē dupli
catio p̄mi pūcti. 7 7 dupli. nūj. pūctor sequētiū. s. de pūctis 4 Vbi g̃
sūs p̄mi pūcti ē 1 si z tcij 6 q̄rti 18 q̄nti 4 t sexti 16 z
septimi t 8 6 octāui 1 t 4 8 noni t z 7 t q̄b' ōib' uacuis fuerit
6 4 6 1 q̄ īse mlēa 6 4 6 1 in se mlēa fuerit t z o t 6 7 z 1
qui nūs sūs dispositus ē duplicatio p̄mi pūcti 7 er dupli octo sequē
tiū pūctor. s. de pūctis 17 Vñ si mlēa nūs t z o t 6 7 z 1 īse
redd' 1 8 4 z o z o 1 8 8 8 4 1 8 t 1 ꝑ duplicatione p̄mi pūcti er du
pli 16 pūctor unde ꝑ duplicatiōe pūctor z z q̄ nūo īse mlēa redd'
z t z z 6 8 z 8 z o z 4 1 z t 8 t 6 4 7 8 t 4 o 8 4 z 8 1
ꝑ duplicatione tot' scacherij 7 er unī pūcti āpli. q̄ pūct' duplū tot'
scacherij ē. q̄r op̄ ut tota pars nūi sūi sit nūs duplicatiōis tot' scacherij
q̄r duūsio ꝓpō nūo ꝑ z reddit ꝑ duplicatiōe tot' scacherij
1 1 t t 4 6 1 z 7 z t z o 8 z 7 t 4 7 t 8 8 4 3 t 4 6 4 6 t z 7

Quida dedit unū denar' ad usurā ita q̄ ī q̄nq; ānis debebat duplū ipi'
dr̄ij recipe. 7 ī alijs q̄nq; debebat duplū hūe duor illor dr̄ior. 7 sic sep
de 4 ī 4 ānis duplicabat capitale ipi' 7 usura. q̄rit' q̄t dr̄ios er ipo
dr̄io hūe debeat ī 1 o o ānis. s. duūde ꝓpōs ānos 1 o o ꝑ 4 eri b̄
z o g' nigesiel duplicat' dr̄i' ille. Vñ z o pūctor scacherij gerit
similitudinē. q̄r si duplicauim' ipm dr̄iū nigesiel. hebim' sūmā ī qua
ipe dr̄i' ascenderit ī 1 o o ānis. t alt'. duplica ipm dr̄iū erī̄ z ī q̄
nūo ipe dr̄i' ascendit ī p̄mo q̄nquēnio. q̄ z tūn mlēa īse erī̄ t
ī q̄ nūo ipe dr̄i' ascendit ī so q̄nquēnio. q̄ t tūn mlēa īse erī̄ 16

erī̄ nūcie 7 q̄q̄d s 1 t o erī̄ lib'
7 q̄q̄d s z t erī̄ sextarius. 7 q̄q̄d
s. 4 o o

81

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q̄ nūs ē sūma ī q̄ ascendit ille dr̄i ī q̄rto q̄nquēnio. q̄ 16 duplica erūt
zz ꝑ sūma q̄rta q̄nquēny. q̄ zz ī se mlca erūt 10zt ꝑ sūma
decimi q̄nquēny. q̄ 10zt ī se mlca erūt reddt dr̄ios 10t8476
ꝑ sūma vigesimi q̄nquēny q̄. s. ānox vꝫox 100 q̄ sē libre tzbq
7 dr̄y 16 Cadē regla ē de hoīe q̄ uēdidit zo paria pelliū. er ꝑ
quox debebat hre 1 dr̄ū. er so z er tcio t 7 sic sēp duplicā
do usq ad ultimū par. quox sūma ē dr̄ 1 minꝰ de ꝑdēa sūma.

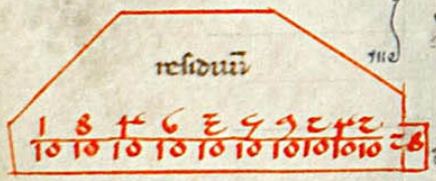
Septē uetule uadt romā. quar q̄libꝫ hꝫ burdones 7 ī q̄libꝫ burdē
sē sacli 7 ī quolibꝫ saculo panes 7 q̄libꝫ pan̄s hꝫ cultellos 7 et
quilibet cultellꝰ hꝫ vaginas 7 Q̄rit sūma oīū ꝑdcox. ꝑmū q̄dē mlca
nūm uetularꝫ. s. 7 ꝑ nūm burdonox. s. ꝑ 7 erūt burdōes t9 q̄s
mlca ꝑ nūm vasarꝫ. s. ꝑ 7 erūt vasche zt9z q̄s mlca ꝑ nūm panū
unī vasche. s. ꝑ 7 erūt panes zt901 q̄s mlca ꝑ nūm cultellox unī
panis. s. ꝑ 7 erūt cultelli 16807 q̄s mlca ꝑ nūm cultellox vagi
narꝫ unī cultelli. s. ꝑ 7 erūt vagine 11769 q̄libꝫ uētis eū cultel
lis 16807 et eū panibꝫ zt901 7 eū sacis zt9z 7 eū burdōibꝫ
t9 7 eū uetulis 7 erūt ī sūma 1379z96 ut ī deseptiōe ostē
dit. Sz alr q̄t sē gūa rex unicuiq uetule tot septimos ꝑdē ī qua
dā vga ē gūa rex ascendāt ꝑ septenariū. 7 ān vsq̄ vgū ꝑdē 1 ꝑ
una uetularꝫ. 7 retō vgū ꝑdē 7 .s. nūm uetularꝫ. 7 mlca 1 ꝑ ꝑma 7
et 7 1/7 1/7 1/7 1/7 1/7 = 1 7 adde unū q̄ ē sē ipa. 7 erūt 8 q̄ ꝑ alā 1/7 erūt
9 7 q̄ mlca ꝑ tcia 1/7 q̄ ꝑ reliq̄s septimas 7 habe ꝑ mō rex unī ue
tule 1760 8 q̄ mlca ꝑ 7 q̄ ꝓsitu sē p̄ vgl̄am erūt 1379z96 ut
ꝑ alīū modū ūeīm.

Est arbox q̄ hr̄ ramos 100 ī q̄libet ramo sē mdi 100 ī q̄libet
mdo sē ova 100 ī q̄libꝫ ouo sē aues 100 sūmā ē rex potes īue
nire ꝑ sēl regias uetularꝫ. q̄ quālr alr sī debeat hic ostendam. ꝑmū
describe ramos 100 ān q̄s ꝑdē duo zephiri ꝑr̄ 100 mdos q̄ sē
ī q̄libꝫ ramo. erūt 10000 ān q̄ 7 ꝑdē duo alā 00 ꝑr̄ ova 100
q̄ sē ī quolibꝫ mdo erūt 1000000 ān q̄ 7 adde 00 duo ꝑ 100
anīb̄ q̄ sē ī quolibꝫ ouo erūt 1000000000 deīn dole zephiros q̄ sē
ī ꝑmo gradu 7 ī tcio 7 q̄rto 7 ī septīo illī nūi. 7 ꝑdē ī eisdē gradib̄ 1
7 sic habes 10101010100 ꝑ q̄stu sūma. Sā si sēl spes ꝑ nox. s. 7 mi
dox ovox 7 aiūm ꝑ mill. nūm accrescerēt. ponerē ī ꝑo ramos 1000
ān q̄ ponēs ī tā zephiru ꝑ mdis 7 tā alā ꝑ ovis 7 tā alū ꝑ anīb̄ sic
1000000000000000 de q̄ mō debes deīde ꝑmū 7 q̄rtū ab eode. s. q̄rtū
7 septimū 7 decimū. 7 ꝑdē unicuiq ī eisdē gradib̄ 7 habes sūmā vsq̄
ut hic ostendit. 100 100 100 1000 7 sic ī reliq̄s si sēl sic ascenderēt
ꝑ decē mill. ut ꝑ cētū mill. ut ꝑ q̄libꝫ alīū nūm unicuiq hīrē ī ultīo
gradu. et zeph ī reliq̄s.

1379596
7
t9
3t3
zt01
16807
11769

Sūma
1379596

Sūma
100 100 100 1000



Quidam habuit lib. 100 ex quibus quolibet anno de 4 faciebat 5 tam de lucro quam de capitali. Queritur quot ex eis in decem et octo annis habuit per 18 annis scribe lib. quadam virgula terminante in circulo assimilis decem et octo vicibus 4 et sic quilibet 4 pone 5 ut hic ostenditur 1000 [illegible] sic hoc facimus quia in primo anno fac. 5/4 ipsarum lib. 100 et in secundo fac. 5/4 de 5/4 [illegible] in tercio fac. 5/4 5/4 5/4 ipsarum 100 quia intelligas de reliquis positis annis et ideo lib. 100 ponende sunt retro per virgam ut partes ipsius virge denotent partes earum deinde multiplica omnes numeros qui sunt sub virga in se quam summam totam multiplica per lib. 100 et divides per omnia 4 que sunt sub virga. Que omnia sic sunt levius videlicet ut multiplices priora 5 per sequentia erunt 25 que multiplica in se erunt 625 que est summa multiplicationis iiij quinariorum que 625 multiplica in se erunt 390625 que est summa multiplicationis octo quinariorum que multiplica per 5 erunt 1953125 que numerum multiplica in seipsum reddit per summam omnium quinariorum 381469726562 5 que multiplica per 100 et divide per summam per omnia 4 que sunt sub virga optime coactata exibunt 40345624727 0/8888888888888 5551 per questionem summa.

Summa

40345624727 0/8888888888888 5551

Quidam habuit lib. 100 et transivit per xij civitates et oportebat ut in unaquaque illarum civitatum daret decimam suorum bizontiorum quos deferebat secum. Queritur quot remanserint ei post exitum xij civitatum quod dabat decimam in unaquaque civitate sequebatur nec quod sibi remanerent 9 decimae omnium bizontiorum quos ipse devalebat in ipsa civitate. Queritur pones duo: 9/10 duo [illegible] per ordinem in quadam virga terminante in circulo assimilis sic

1000 9/10 9/10 9/10 9/10 9/10 9/10 9/10 9/10 9/10 9/10 9/10 9/10 et multiplica in unum omnia 9 que sunt sub virga 9 per 9 que per 9 erunt 729 que multiplica in se erunt 531441 que sunt summa [illegible] novenariorum quam summam multiplica in seipsam reddit 282429536481 per summam omnium novenariorum que multiplica per 100 et divide per omnia 10 [illegible] 1 8 4 6 3 5 9 2 4 2 / 10 10 10 10 10 10 10 10 10 10 28 [illegible]

residuum

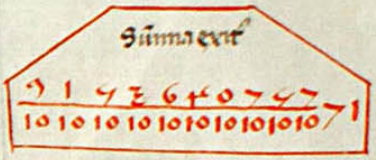
1 8 4 6 3 5 9 2 4 2 / 10 10 10 10 10 10 10 10 10 10 28

[illegible] 28 [illegible] 10 [illegible] 1 [illegible] 10 [illegible] 10 [illegible] 9 [illegible] 10 [illegible] 1 [illegible] 1 [illegible] 10 [illegible] 8 [illegible] 10 [illegible] 9 [illegible] 10 [illegible] 1 [illegible] 10 [illegible] 1 [illegible] 4 [illegible] 10 [illegible] 5 [illegible] 10 [illegible] 5 [illegible] 10 [illegible] 1 [illegible] 6 [illegible] 10 [illegible] 7 [illegible] 10 [illegible] 3 [illegible] 10 [illegible] 4 [illegible] 10 [illegible] 6 [illegible] 10 [illegible] 1 [illegible] 5 [illegible] 10 [illegible] 10 [illegible] 4 [illegible] 10 [illegible] 1 [illegible]

[illegible] 9 [illegible] 10 [illegible] 10 [illegible] 0 [illegible] 10 [illegible]
[illegible] 1 [illegible] 2 [illegible] 10 [illegible] 10
[illegible] 7 [illegible] 10 [illegible] 1 [illegible] 4 [illegible] 10 [illegible]
[illegible] 10 [illegible] 4 [illegible] 10 [illegible] 1 [illegible] 2 [illegible]
[illegible] 10 [illegible] 10 [illegible] 7 [illegible] 10 [illegible]
[illegible] 1 [illegible] 68 extrahe de [illegible] 100 [illegible] 71 [illegible]
[illegible] 0 $\frac{9}{10}$ $\frac{1}{10}$ $\frac{4}{10}$ $\frac{3}{10}$ $\frac{6}{10}$ $\frac{4}{10}$ $\frac{0}{10}$ $\frac{7}{10}$ $\frac{4}{10}$ $\frac{7}{10}$ 71 [illegible]
[illegible] hoc [illegible]
[illegible] extrahe [illegible] 100 [illegible] 10
[illegible] 90 [illegible] 90 [illegible] 9 [illegible]
[illegible] 81 [illegible] 81 [illegible] $\frac{1}{10}$ 8 [illegible]
[illegible] $\frac{9}{10}$ 72 [illegible]
[illegible] 72 [illegible] 10 [illegible]
9 [illegible] 729 [illegible] 10 [illegible] $\frac{9}{10}$ $\frac{2}{10}$ 7 [illegible] $\frac{9}{10}$ 72 [illegible]
[illegible] 9 [illegible] 10 [illegible]
[illegible] 72 [illegible] 10 [illegible] 72 [illegible] 7
[illegible] $\frac{9}{10}$ $\frac{2}{10}$ 7 [illegible] $\frac{9}{10}$ 72 [illegible]
[illegible] 7 [illegible] 729
[illegible] 72 [illegible] 729 [illegible] 10 [illegible]
[illegible] 729 [illegible] 6561 [illegible] 100 [illegible] $\frac{1}{10}$ $\frac{0}{10}$ [illegible]
$\frac{1}{10}$ $\frac{6}{10}$ 64 [illegible] 72 [illegible]
[illegible] 10 [illegible] 10 [illegible] 0 [illegible]
[illegible] 7 [illegible] $\frac{0}{10}$ $\frac{9}{10}$ 72 [illegible] 9 [illegible] 10 [illegible] $\frac{9}{10}$ $\frac{2}{10}$ 7
[illegible] 0 [illegible] 10 [illegible] $\frac{0}{10}$ $\frac{9}{10}$ 72 [illegible] 10
[illegible] 0 [illegible] 0 [illegible] 10 [illegible]
[illegible] 9 [illegible] 1 [illegible] 10 [illegible]
[illegible] 1 [illegible] 2 [illegible] 10
[illegible] $\frac{9}{10}$ $\frac{2}{10}$ 7 [illegible] 3 [illegible] 9 [illegible] 10 [illegible]
[illegible] $\frac{0}{10}$ $\frac{9}{10}$ 72 [illegible] 6 [illegible] 10 [illegible] 7
[illegible] 72 [illegible] 64 [illegible]
[illegible] $\frac{1}{10}$ $\frac{6}{10}$ 64 [illegible]
[illegible] 64 [illegible] 10 [illegible] 6 [illegible] 10
[illegible] 1 [illegible] 64 [illegible] 6 [illegible] 1 [illegible]
[illegible] 6561 [illegible] 10 [illegible]
$\frac{1}{10}$ $\frac{0}{10}$ $\frac{0}{10}$ [illegible] $\frac{1}{10}$ $\frac{6}{10}$ $\frac{4}{10}$ 6 [illegible]
[illegible] 1 [illegible] 10 [illegible]
64 [illegible] 6 [illegible] 10 [illegible]
[illegible] 64 [illegible] 4 [illegible] 6 [illegible]

Summa exit

$\frac{9}{10}$ $\frac{1}{10}$ $\frac{4}{10}$ $\frac{3}{10}$ $\frac{6}{10}$ $\frac{4}{10}$ $\frac{0}{10}$ $\frac{7}{10}$ $\frac{4}{10}$ $\frac{7}{10}$ 71



hebis 1/10 6/10 7/10 6 p decima pte de sris.b. 1/10 6/10 6 7 qr erthe upos ab upis
q duplr p sros nuos ertruhunt qs modos hic retinebimus ut trehqs cum
tribus melius scias predcm mlca.b. 6 p eox uglam. 7 hebis millenas 6 7 6 1
silr mlca 6 7 p sua uglam. t poe aia upa figus q sic sr uglis reos silr pos
dine ppcendo er cesesime 6 7 6 1 qs mlca p 10 ur sit mill. sic sr alie
qs delet hic erhere. ert mill 6 7 6 10 de qb erthe mill 6 7 6 1 remanet
7 3 0 t 9 qs duide p 1000 hoc e p 1/10 0/10 0/10 erit 3/10 t/10 0/10 49
p qlto residuo. vl alr p truhe res uglam de 6 7 7 poel sb upa dece. 7 sup
upa dece poe 0 ut hic ostendit 0/10 1/10 6/10 67 dein 1 qe sr 10 de
ugula de 1/10 6/10 7/10 6 erthe de 0 qe sr 10 de ugla de 6 7 qr cu pt
u sit. adde cu upo 0 nm ersterte sub upo.s. 10 ert 10 de qb erthe sm
1 remanet 9 q poe sr pma 10 cuida prete ugle. sub q sic sr decime. 7 p
addito decenario. retine i manu 1 q. adde cu 6 q sr sr 10 ugle de
1/10 6/10 7/10 6 ert 7 q erthe de 1 qe sr sm 10 de ugla de 0/10 1/10 6/10 67
qr cu possible no sit. adde cu upo 1 nm ersterte sub upo.s. 10 ert 11
er qb erthe stu 7 remanet t q poe sr sa 10 prete ugle 7 p 10 q
uirtm cu 1 retine i manu 1 q. adde cu 7 q sr sr ultia 10 ugle de 1/10 6/10 7/10 106
ert 6 q erthe de 6 q sr sr ultia 10 ugle de 0/10 1/10 6/10 67 remn 0 q poe
sr ultia 10 prete ugle. dein erthe.b. 6 de.b. 6 7 remanebt.b. 49
qs poe aia pretu uglam 7 heb silr.b. 3/10 t/10 0/10 49 p qlto residuo. de qb er
truhe decima p qualc uoluit modu er stus duob mois qe.b. 3/10 t/10 0/10 3/10 4
qs dedit i serta cui. remanebt.b 1/10 t/10 t/10 1/10 47 de qb erthe decima
qua dedit i septia cui qe.b. 1/10 t/10 t/10 1/10 7/10 4 7/ de qb erthe de
cima qua dedit i octaua cui.s.b. 3/10 6/10 3/10 7/10 8/10 7/10 1 remanebt bis.
1/10 7/10 7/10 6/10 t/10 0/10 t 7 de qb erthe decima q dedit i nona cui.s.b.
1/10 7/10 3/10 6/10 0/10 7/10 0/10 1 remanebt.b. 3/10 8/10 7/10 0/10 7/10 t/10 0/10 7/10 28 de qb erthe
decima q dedit i decima cui.s.b. 3/10 8/10 t/10 0/10 7/10 t/10 7/10 8/10 0/10 7 remanebt
.b. 1/10 0/10 t/10 t/10 8/10 7/10 6/10 8/10 0/10 1/10 0/10 7 de qb erthe decima q dedit undecima cui.s.
.b. 3/10 3/10 6/10 3/10 0/10 1/10 8/10 7/10 1/10 0/10 0/10 0

Eadē q̄o ē de bucte ī qua ſt̄ bauriles 1 o o unū er quib⁹ p ſigl'oſ mēſes erūt
hīt̄ decimū reſidu. 7 q̄rū q̄t bauriles ī fine āni remāſerūt. ſ. p̄ 1 2 menſes.
ſ̄ā ſi oēs ꝓpōnū eēt. q q̄dā hūſ bīz̄oſ p̄rerit p 1 2 cuū. 7 dedit ī unaquaq
cuū decimā reſidu ſuoꝝ bīz̄. 7 remāſerūt ei. b. 1/10 8/10 1¹/10 6/10 3/10 5/10 2/10 2/10 1²/10 2/10 2 8.
7 q̄rū q̄ta ſit ſūma bīz̄oꝝ ꝓpī. deſcribe ī ordīe duodecies 2/10 ſub quadā ū
gula ſ̄a t̄cē ut hic oſtendit. 2/10 2/10 2/10 2/10 2/10 2/10 2/10 2/10 2/10 2/10 2/10 2/10 7 mīlia
bīz̄oſ 2 8 cū ſint ſinguloīb⁹ p oū 1 o q̄ſ ſ̄ ſub duodecī nouenariſ̄ p̄ſcpte
ūgle. 7 deinde ſūmā ꝓpī mīlionis ꝑ illoſ duodecī nouenarioſ. eū poſiti
ſūīnt ſub quadā ūgla. 7 ſic hebit. b. 1 o o ꝑ ſūma illī.

Suma
1 o o

Quidā hūſ bīz̄oſ uoluit ēmere de quadā ciuitate hīnte p̄tas 1 o 7 ꝓpō
nit eī dare p̄me p̄te 1/2 ſuoꝝ bīz̄oꝝ. 7 iſtū 1/2 unī bīz̄. ſc. dimi
diū bīz̄. q̄ſ ibi attulit 7 iſt̄ 1/2 unī bīz̄. t̄cie t̄cū 7 1/4 unī bīz̄. q̄r
q̄rtā 7 1/4 unī bīz̄. 7 ita ꝑ ordīē uſq; q ī decima p̄ta dedit deci
mā bīz̄. q̄ſ ibi attulit. ev 1/10 unī bīz̄. 7 remāſit ei. b. 1 q̄rū q̄t
bīz̄. hūit ille. ꝓceſſ iſte q̄ h̄ q̄ſtio duplīr ſoluī. p̄mū q̄dē ut de p̄ta ī
p̄tā. ab ultīa īcipiendo eḡ diarilſic. ſ̄ā ī fine remāſit ei. b. 1 7 de
dit ultīe p̄te decimā unī bīz̄. g̃. cū ipe dedit ſpam decimā. habet
bīz̄. 1/10 1 7 q̄ te dederat decimā bīz̄ q̄ſ ibi attulit. 7 remāſit ei ꝓpīa
bīz̄. 1/10 1 īueīendū ē nūſ er q̄ erūtū 1/10 rēmeat. b. 1/10 1 quē nūm po
ne ut ſit 1 o ſm regl'aſ arbor. de q̄ erūto 1/10 remanēt 9 q̄ 9
uellēt ēe 1/10 1 q̄r mīlia 1 o ꝑ 1/10 1 7 diuidel p 9 eribē. b. 5/9 1 7 tīm re
mānēt ei p̄ nonā p̄tā. cū q̄ adde 1/9 unī. b. q̄ dedit none p̄te. eū
. b. 1/2 1 q̄r īueīel nūm de q̄ erūto 1/9 ꝓpī remaneat. b. 1/2 1 hoc
g̃. q nūm ille ſit 9 de q̄ erūto 1/9 remanēt 8 q̄ uellēt ēe 1/2 1
q̄r mīlia 1/2 1 p 9 7 diuidel p 8 eribē. b. 1/2 1 7 tīm remānt ei p̄ octa
uā p̄tā. cū q̄ adde 1/8 unī. b. q dedit ī ſpa p̄ta. eūd. b. 7/8 1 q̄ de
mōſtrat̄a t̄cē mīl. p 8 7 diuide p 7 eribē. b. 6/7 1 cū q̄ adde 1/7 unī
. b. q dedit ſeptīe p̄te. eūd. b. 2 q̄ſ mīl. p 7 7 diuide p 6 eribē
. b. 5/6 2 cū q̄b⁹ adde 1/6 unī. b. quē dedit ſexte p̄te. eūd. b. 1/2 2
q̄ſ mīlia p 6 7 diuide p 5 eribē. b. 2 cū q̄b⁹ adde 1/5 unī. b. q
dedit quīte p̄te eūd. b. 4/5 2 q̄ſ mīlia p 5 7 diuide p 4 eribē. b. 4
cū q̄b⁹ adde 1/4 unī. b. q dedit q̄rte p̄te eūd. b. 1/4 4 q̄ſ mīlia p 4
7 diuide p 3 eribē. b. 2/3 5 cū quib⁹ adde 1/2 unī. b. q dedit t̄cie
p̄te eūd. b. 6 q̄ſ mīlia p 3 7 diuide p 2 eribē. b. 3 7 tot remā
ſerūt ei p̄ ſā p̄tā. cū q̄b⁹ adde 1/2 unī. b. q dedit ī ſa p̄ta. eūd. b. 1/2 3
p q̄b⁹ īueīel nūm er q̄ erūto dimidio ꝓpī. remaneāt. b. 1/2 3 p q nūo
ponel 2 erquo erūto dimidio rēmeat 1 q uellet ēe 1/2 3 q̄r mīl.
1/2 3 p 2 7 diuidel p 1 eribē. b. 1 3 7 tot remānt ei p̄ p̄mā p̄
tā. cū q̄b⁹ adde 2/2 unī. b. q̄ſ dedit ī p̄ma p̄ta. eūd. b. 2/2 1 3 p q̄b⁹

Summa 49

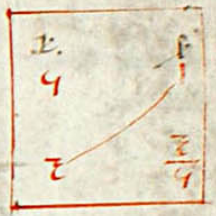
Inueniendus est numerus de quibus extractis $\frac{2}{3}$ ipsius remaneant .b. $\frac{2}{3}$ 19 [illegible] numerus ille
sit 3 ex quo extractis $\frac{2}{3}$ remanet 1 quod uellet esse $\frac{2}{3}$ 19 quod multa $\frac{2}{3}$ 19
per 3 et diuides per 1 secundum sui arboris regulas exibit .b. 49 et tot habuit ille.

Alter inueniamus primum summam bizantiorum de qua potuit dare partes suas in 10 portas
sine fractionibus unius .b. que adduntur in eisdem portis. quod inueniens sic quia ex ipsa summa
dedit prime porte $\frac{2}{3}$ ergo ex eadem remansit ei tercia pars de qua tercia dedit dimi
diam in secunda porta. et sic remansit ei dimidium tercie partis eiusdem summe. de quo dedit in
tercia porta terciam partem. et sic remanserunt ei due tercie medietatis tercie partis eiusdem
summe quod in ordine si de porta in portam processeris inueniens ei remansisse in fine
x. portarum $\frac{0}{10}$ $\frac{9}{9}$ $\frac{8}{7}$ $\frac{6}{6}$ $\frac{5}{5}$ $\frac{4}{4}$ $\frac{3}{3}$ $\frac{2}{2}$ $\frac{1}{1}$ $\frac{1}{3}$ ex predicta summa. quod residuum portarum fuisse
.b. 1 Quare que portio habet denominationem ipsius virge ad denominatum eiusdem proportionem habet
1 ad predictam summam. Quare multa cibi summa multiplicationis omnium numerorum qui sunt sub
uirga per 1 et diuides per omnes numeros qui sunt sub uirga inter quos est euitatio maxima ita quod
non oportet multiplicare nisi 3 per 10 scilicet numeros extremos et diuides per 1 et habebis 30
quos oportuit eum habere ut persoluerit suas partes in prescriptis partis et remaneat ei
.b. 1 Nunc ut habeamus bizantiorum de quibus ipse persoluit fractiones unius .b. in singulis por
tis multa $\frac{2}{3}$ unius .b. quas dedit in prima porta per 3 que primo posita sunt sub uir
gula et diuide per 1 quod est ipsa 3 erunt .b. 2 quos adde cum 30 inuentis erunt .b.
32 Nam ipsi .b. 2 sunt illi de quibus dedit duas partes et remanserunt in $\frac{2}{3}$ unius
.b. quas dedit in prima porta. Item multa $\frac{1}{2}$ unius .b. quod dedit in secunda porta per 3
et per 2 que sunt sub uirgula et diuide per 1 quod est super 3 et per 1 quod est super 2 erunt
bizantiorum 3 de quibus dedit in prima porta $\frac{2}{3}$ ipsorum et in secunda dimidium reliqui et in
dimidium unius .b. quod dedit in secunda porta quibus .b. 3 additis cum bizantiis 32 inuen
tis erunt 35 Item multa $\frac{1}{3}$ unius .b. quam dedit in tercia porta [illegible]
portarum qui sunt [illegible] sub uirgula scilicet per 3 que per 2 que per 3 et diuides per nu
meros qui [illegible] per 1 quod est 3 et per 1 quod est 2
et per 2 que sunt [illegible] 3 erunt similiter .b. 3 quos oportuit eum habere in tercia porta ut persol
uerit [illegible] $\frac{1}{3}$ unius .b. eiusdem porte quibus additis cum .b.
35 [illegible] 38 [illegible] multa $\frac{1}{4}$ unius .b. per numeros [illegible] portarum qui
[illegible] per 4 [illegible] per 3 [illegible] per 2 [illegible] per 3 et diuides per numeros earundem
portarum [illegible] 3 [illegible] 4 et per 2 [illegible] 3 et per 1 quod est
super 2 [illegible] 1 [illegible] 3 [illegible] similiter .b. 3 quod idem
[illegible] .b. 3 [illegible]
[illegible] 21 quibus addi
tis cum bizantiis 38 inuentis reddent [illegible] 49 pro summa bizantiorum illius.

Incipit capitulum de regulis elchatayn &c per ipsam fere omnes questiones abbaci solubiles

Elchatayn quidem arabice latine duarum falsarum positionum regula interpretatur per quas fere omnium questionum solutiones inueniuntur ex quibus una est illa per quam mercatores per duodecim capitula regulis arbor et similium soluere documentis. In quibus tota elchatayn satis quas positiones ponere non oportet. Quia primam earum ipse questiones solum positione et qualiter ipse et multe alie questiones per elchatayn solui debeant uolumus demonstrare. Ponuntur ipse due false positiones forte quas occurrit que quidem ambe minores sunt ueritate quandoque maiores quandoque una maior et altera minor et inueniantur solum ueritate sed proportionem differre unius positionis ab alia. Hoc est quod dicit in regula quarte proportionis in qua tres nimis sunt noti. per quos quartus ignotus i. solius ueritas reperitur. quorum primus numerus est differencia unius falsi positionis ab alia. Sed est ibi quinquagesimo que sit ueritati proprium differencia. Tertius est residuum quod est ab ipso quantitatis ueritati. Que qualiter fiant primi in regula ementur demonstrare uolumus. Ut per ipsos differencias subtiliter inuentorio demonstratos alias questiones solubiles per elchatayn subtiliter ualeas intelligere.

Valent emi emere. s. lx c lib xl et requiritur quidam ualoris. lx. i primum fortuitu quod. lx i ualent s i et lx c sol emi ualebit ea ratione. sol c sol liber et sequitur secundum emitur est lib xl. Deo in prima positio falsi est distat aduertatur. lib viii sol dili que est aliter et usque aliter xl Deinde in ipsa lx quam sol et sol s i plus prima positione quia ratione emitur ualet sol cc sol lib x et hec similiter positio falsa est longe a ueritate lib xl et differencia que est alib x usque mlib xl Item in prima positione ad minus longe a ueritate lib viii Insecta lib xl et differencia que est a prima positione inscia sol lx i ad quam ueritatem lib iiii sol que est alib viii usque mlib xl et est ibi adhuc ad ipsam ueritatem lib xl si dicet poterit. xl quot addi debeo lx i ad quantum positio emitur lib iiii quid sup addi et positio eidem lx ut ad ipsam quod lib xl que ablata supra secundam positionem ad positio est emitur. nihil et remanet numerus eruditus primo ibi sed quod mirabile arbitrer simul et monstruum. uidel xl et lx eruditus et iiii et qui est medius numerus est ibi xl et dimidium et quibus additis sup sol xl qui poterit fuerit in ista positione. habebit positio unius lx sol xl et dimidium et fuerit emi ille due positiones minores sunt uero inter. Nunc ergo ponamus que sint ambe maiores ponatur et fortuitu quod lx i ualent sol xl qua ratione totius emi ualebit lib cc et plus quam dicere. et hec positio falsa est. ponatur ergo insecta positione sol xl positio et



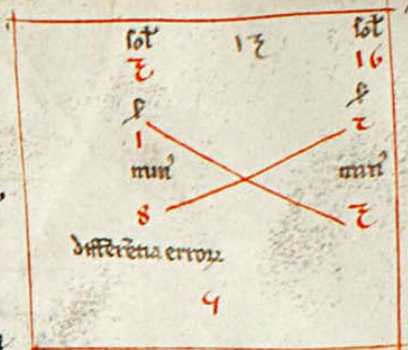
xx. sol' dr' 12 mm' qua' imp'ma ꝓcione. qua rō totā cam' ualet
x 14 sol' lib' 2 mag' qui tenet. Vn' et h' simili falsa ē. Nā
,pdr' 12 quot minuta' insedā ꝓcione tepcio uni' xx'. adppm
quauim' lib' 4 sol' dnar' que ē alib' 7 usque ī 2 remanent ꝓ
duc lib' adhuc adppinquandum. Vn' dicet ,pdr' 12 quot minu
tepcio x'. adppinquum uerum lib' 4 quid minuam de sedā ꝓcione
ut adppinquē lib' 2 mlca ē extremos. s. 12 x. 2 diuides
ꝓmediū. s. x. 4 exibit' 5/4 x quilz erunt de sol' 2 sedē ꝓcionis
remanebūt simili ,xpcio illi xx. sol'. 2 dr' 1/4 7 Itē ut una ꝓcio
sit maior et altera minor ꝓxima' ,xpcio illi xx. sol' 2 qua rō cam'
ualēt lib' 14 sol' lib' 2 magis quā tenet. ꝓxima' insedā ꝓcio
,xpcio xx sol' 2 qua rō cam' ualēt lib' 10 quod ē 2 mm' quā te
net. ē ,pdr' 12 quot minuta' insedā ꝓcione. minuta' ē ,ꝓpis dr'.
minuta' lib' 2 a'ma ꝓcione insedā. cui non reperit' ādm
mundū 1 lib' 2 ul'cra' lib' 4 a sedā ꝓcione imp'ma cui nō repe
rit' adcrescendū 1 cra' lib' 2 qr' hoc duplicat' dicere pot'. p'mū
quidē dic ,pdr' 12 quot minuta' ep'ma ꝓcione minuta' lib' 4 q'
minuem' q'rendem ut minuam' tm' lib' 2 mlca 12 x. 2 diuides
x 4 exibit' dr' 5/4 4 quilz erunt ex sol' 2 p'me ꝓcionis. re
man' sol' 2 dr' ,xpcio illi xx. Vl' dic. ,pdr' 12 quot erunt a sedā
ꝓcione imp'ma erunt lib'. 4 quid adcresci' si ipam sedam ꝓcione
ut adcrescāt lib' 2 mlt' ē 12 x 2. diuides x 4 exibit' dr' 4/7
quilz addit' cui sol' 2 sedē ꝓcionis. habebis simili ,xpcio illi xx sol' 2
dr' 4/7

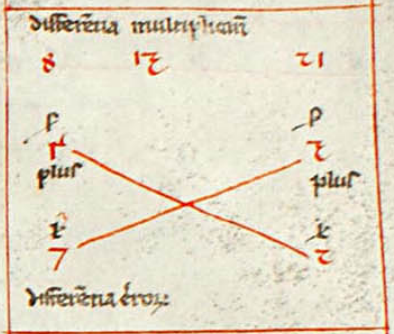
q' imp'ma ꝓtio ē sim' xl. 2 q' ī sedā ꝓtione minuit' ē ꝓ ipis dr' 12 minuta minus. l. 4

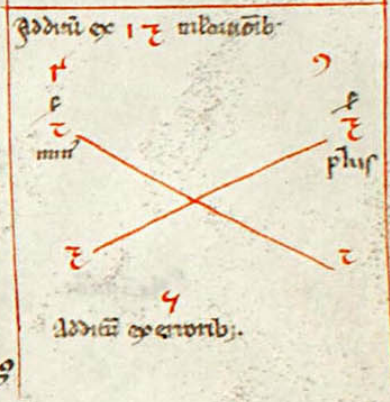
ꝓcio xx.
x 2
4/7 2

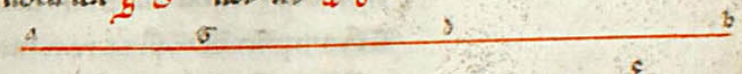
Et ē alius modus eḍ̄ atq; qui regla augmti 2 diminuc'oīs appel
latur unquo ꝓuenit' errores sub ꝓcionibz suis et mlcat' error p'mi
ꝓpositionis sedm et error sedi ,xpcionis p'mā. Et si errores fuerint
duo diminuta ul' ambo addita ernantur minus' summa ꝑdictaꝝ mlcatio
nū remanori. 2 residuū diuidit' ꝑ differentiā errox 2 sic inuenitur
solucio questionū et si' fuit error additus et alt' diminut' et addit'
in simil' ambo mlcationis' 2 summa diuidit' per errox cū uiccione. Vbi
gra ꝓsumi' sup ,xpcio uni' xx sol' 1 cuiquo eorum' in libris 8
diminuit'. qr' ꝑs 8 sub 1 et notab' mm' sun' 8 cū sint diminuti
din qua insedā ꝓcione posuim' sol'. 2 ,xpcio eidem xx et eorum'
adhuc in lib' 2 diminuit' ꝑs sol' 2 an p'mā ꝓcionē et sub ipis
ponc errorē ecox. s. t' 2 si' qual notab' iterum minus q' sint ut supi
dicaem' et mlcab' sol' 2 p'mum p'mi erroris erit sol' 16 et sol' 1
p'mum erroris sedi erit sub sol' 2 Et qua ambo errores fuerē dimi
nuti exit' minorem mlcationē remanori. s. 2 dr' 16 remanet

sol' 12 quibꝫ diuisis ꝓdifferenciam erroꝝ .s. ℔. 4 uenimus sol' 2/7 2 ut superius inuenim⁹. Rursꝰ cum superi⁹ fecim⁹ uenire erro res amito addentes posuim⁹ impma ꝓsiacone sol' ℔ et ceruicum⁹ cum 7 addim⁹ et misdā ꝓsiacone posuim⁹ sol' 2 et ceruicum⁹ iter cum 7 ad dim⁹ ut in hac alia patet desꝛcte. Quare mlcab ꝓsiacone sedam ℔ nim erroꝝ ꝑim⁹ .s. ℔ 2 erũt sol' 21 et 2 ℔ ℔ erũt sol' 8 et quia amito errores fuerũt sic habundantes duides diffim⁹ mlciacoim ꝓdi fferenciam erroꝝ .s. 12 ℔ 4 ethalebis silr sol' 2/7 2 Rursus cum fecimus ꝑmum eoꝝ deficere et alium sim⁹ habundare posuim⁹ ꝑio unusq⁹ ipm⁹ ꝓsiacone sol' 2 et misdā sol' 2 et ꝑim⁹ erroꝝ fuit 2 diminuta et sedo 2 additu ut in hac alia ꝯis desꝛcte. Qꝝ mlcab 2 ℔ 2 et 2 ℔ 2 erũt sol' 9 et sol' ℔ quos addentes simb cum unoquoq⁹ erroꝝ sic diminuto et alto additus erũt sol' 12 quos duides ꝓcum numeꝝ ex erroꝝ hoc est ℔ 4 erunt silr sol' 2/7 2 hoc est sol' 2 et est 5/7 2 que superi⁹ inuenim⁹. Nũ ut unde h̄ ꝓueniant demonstrem⁹. Ducatur ignotus nus .a.b. sili ter uera solucio aliaꝝ quesnoꝝ. que solui possint ꝓ elchatayem. et quo nus sumatur nus .a. g. Notꝫ ꝑma ꝓsiacone cui error sit nus .e g. deficiam⁹ et ꝑsedā ꝓsiacone sumatur iter ex nō ab nus ad similiter notꝫ cui error sit nus .g ℔. similiꝫ deficiam⁹ et nō notꝫ unusq⁹ quoq⁹ nuꝝ e ℔ g ℔ Qꝝ differencia que est inꝛ utrunq⁹ erroꝝ .s. nus e ℔ est notus. silr g d nus qui est inter utrasq⁹ ꝓsiacone est notꝫ cui nus ꝓsiacoim silicet .a. g. et .a.d. sive non sed nus .b.d. remanet ignotꝫ cui totus .a.b. sic ignotꝫ oporteret utique si questio fuit solubilis ꝓ elch tayem ut sic fiat. e ℔ notus ad ℔ g notum uel g d notꝫ ad a b ignotus Qꝝ sedm ꝑmum modum









mlcanum ℔ g ℔ g d et diuidim⁹ ℔ e ℔ silr et mlcanum erroꝝ sedm ꝓdifferenciam eoꝝ ethalem nocꝝ nim d.b. que addim⁹ supsedam ꝓsiacone .s. sup .a.b. et sic habem⁹ nocꝝ nim .a.b. .s. solucione ꝓpte questionis. Sed sedm alium modum mlcim erroꝝ ꝑmum ꝓsiacone sedam .s. e.g. ℔ a.d. et ceruicum⁹ mlciacone erroꝝ sedm impsiacone ꝑmam .s. nus .℔ g. minim. a.g. et diuidi mus residuum ꝓnim .e.℔. et habem⁹ totum nim. a.b. et h̄ ꝓueniꝫ quia cui mlcatur nus .e.g. minim. a.d. tot mlciet nus .e.℔.℔.g. minim. a.d. sed cui mlciet nus .℔.g. minim. a.d. tot mlciet nus .℔.g. minus .a.g. et .g.d. cui mlciet nus .e.g. minim. a.d. tot mlciet nus e.℔. minim. a.d. et nus .℔.g. minus .a.g. et .g.d. sed mlciac. ℔.g. in .g.d. et sic mlciac .e.℔. in d.b. cui sic fiat .e d ℔.g. in .g d. b. Qꝝ cui mlciet .e.g. in .a.d. tot mlciet .e ℔. minus .a.d. et .d.b. hoc est totum nim .a.b. et nus .℔.g. minum .a.g. Vñ fit emulciacione nus.

a d.

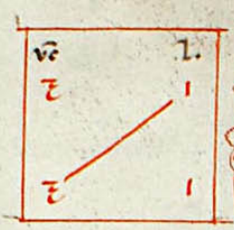
c. g. m. a.d. silicet erroris p̄mi impōitionē sēdm auferat mlcā
tionū. J. g. īmūm. a.g. silicet erroris sēdi impōitionē p̄mā re-
manet mlcatio nūi. c.J. mmūm. a.b. que mlcatio fundat̄ per
eandē. c.J. silicet p̄differentiā errorū mmurū nūm. a.b. p̄uenire
necesse ē quod oportebat ostendere. Rursus sit nūs. a.b. ignotus
uera solutio alicui⁹ quēstionis q̄ solui posset p̄elchatiqm et sit nūs.
a.f. positio p̄ma et nūs. a.c. sēdi. et sē amto p̄tionēs maiores nūi.
a.b. q̄r errores eius erūt addēti et sit nūs. g.J. error p̄me positionis
et g.k. sēdi. Oportet utique ut sit sic. J.k. ad k.g. ut a.c. f. ad
d.c.b. ignotū. Et sūpi ip̄imo modo multiplicatū k.g. silicet errorē
sēdi p̄c.f. silicet p̄differentiā positionū et diuidim⁹ summā p̄mūm J.k.
silicet p̄differentiā errorū et habem⁹ nūm. b.c. q̄ ip̄imi et. a.c. silicet
erroris impōitionē sēdi et remanet nūs. a.b. seu sēdi aliū modū multām nūm.
g.J. p̄mūm. a.c. silicet errorē p̄mū p̄positionē sēdm et ex tertijm⁹ m
multiplicē nūi k.g. īmūm. a.f. silicet erroris sēdi impōitionē p̄mā
et quod remanet diuidim⁹ p̄mūm. J.k. silicet p̄differentiā errorū et
habem⁹ simulq; notū nūm. a.b. qui erit ignotus et hoc fiet quia multat
nūs. g.J. īmūm. a.c. silicet errorē p̄mū impōitionē sēdm et multat nūi
g.k. et k.J. īmūm. a.c. Sed eū multat nūs k.J. īmūm. a.c. et multat
nūs a.b. et b.c. Ita multatio k.J. m. b.c. equat multatōi g.k. m.e.f.
cū sit sic. J.k. ad k.g. ut b.c. ad c.b. Et cū multat nūs. g.J. īmūm.
a.c. tūc multat nūs. g.k. īmūm. a.c. et c.f. hoc ē totū nūm. a.f.
et nūs k.J. īmūm. a.b. Et sic patet g.J. m. a.c. silicet p̄mi erroris
impōitionē sēdm auferēs multiplicatū g.k. m. a.f. silicet erroris
sēdi impōitionē et remanet multatio nūi k.J. īmūm. a.b. que
multatio et [illegible] k.J. silicet p̄differentiā errorē p̄uenit nūs.
a.b. silicet solutio quēstionē et hoc uolum⁹ demōstrare. Iterū ducat
nūs. a.b. ignot⁹ qui sit solo alicui⁹ quēstionis que solui posset p̄elch
thiqm et ex q̄ acquiat nūs. a.g. not⁹ positione p̄ma cui⁹ error sit
nūs. e.g. multat et ex tertia sēdi habeat nūs. a.d. not⁹ que ē maior
nūs. a.b cui⁹ error sit nūs. g.J. Oportet itaq; ut si quelibet solui p̄t
p̄elchatiqm ut sit sic. g.d. ad d.b et g.k. ad k.J. ad e.g. hoc ē quod
sit sicut differentia que ē int̄ positiones additionū que ē a p̄ma p̄tē
īmūm que sēdi tm cū nūcū erroribz ad errorē p̄mū. Et quia ut
fuit sup̄ius cū p̄mū modū oīa fiunt multanim⁹ errorē p̄mū p̄differētū
positionū silicet e.g. p̄ g.d. et diuidim⁹ summā p̄dictū errorū
sēdi īmūm g.b. p̄ addidim⁹ positionē p̄mā silicet sē. a.g. et fiet not⁹
nūs. a.b qui erit ignotus. Vel p̄ fiet sic. g.d. ad d.b. d. ut. e.J.
ad g.J. Et eo multanim⁹ g.J. p̄ g.d. silicet ad errorē sēdm p̄dictū

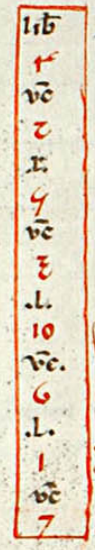
pōnonū et diuisimus sūmā pnām .e.j. silicet pāi uicinū eerrorib; et habuimꝰ .b.d. q̄ errauimꝰ eqnūo .a.d. sat' exp̄one sedā et remansit nūg .a.b. sat' solo pled; ūmodū mlcauimꝰ errore pmū ꝓpone sedz sal' e.ç. p. a.d. et errore sedo ꝓpone pmā. sat' ç.j. p. a.g. quos multiplicationes comgtauimꝰ et eox sūma diuisimꝰ pquicui eerroribz sat' p. e.j. et habuimꝰ solutione quesiti sat' nām .a.b. ser hoc fuit qua9 multiplicet nūs .e.ç. pnām .a.d. tē mlcat' e.ç. īmiōs .a.g. et g.d. quibz mlcationibz cui addatur mlcatio ç.j. ī.ī.g. tūc habet sūma mlcationū mīoz .e.ç.ç.j. nām .a.g. et mlcatiōs .e.ç. ī.g.d. siz mlcatis .e.ç. ī.a.g. et ç.j. ī.a.g. equas mlcationi tot' et j. nām .a.g. ergo cui mlcat' e.ç. ī.a.d. et ç.j. ī.a.g tūc mlcat' e.j. ī.a. g. et e.ç. ī.g.d. siz mlcatio .e.ç. ī.g.d. et sic mlcatio .e.j. ī.g.b. qui ā est sic. j.e. ad.ç. e.ita.d.g. adb.g. Vñ cui mlcat' e.ç. ī.a.d. et ç.j. ī.a.g. tūc mlcat' e.j. īmiōs .a.g. et g.b. hoc ītotū nām .a.b. g cui mlcat' e.ç. ī.a.d. hoc error pmꝰ ī ꝓpitez sedam. et ç.j. ēī.a.g. h error sic ī ꝓpone pmā tū tūc quicui eerpis mlcationibz quatuoz mlcatiōs nāz e.i. nām .a.b. qr cui eox sūma diuidet p. e.j. qui ē quicui eerroꝝ pueit nūs .a.b. quod oppetebat ostēdē. his utiq; demōstratis re stat ostēdē quali pōnone pōt ardemus et eox errores īuenire sedo di ūsitatē questionū et ut h' apti demōstrēt huic caplm indidi pres diuisi.

Imꝑma quarū ostendā soluē quasdam questionibz que solute fuit ꝑmas regule ī pcedētibz caplis. Insedā tractabitur ser solutione ēdā alīqūz questionū denuz nulli fuit mētio Imhoc libro.

Vidam huic monetā que erat admīc teo z Incipit pars ꝑma

et alīa nom que erat admīc 6 et uolut eeqs fieri libram 14 monete que erat admīc 4 querit quātā summa quaq; moneta ī pdicto cōsolamine mittere debuit. Una mlibri mon. quā uolut fieri opportuit habere unc 4 argēti. g mlib 14 opportuit hre quidem qui mina libre. s. uncias 74 quibz exparte seruatis pone adlibitū de minori moneta ut sic in tpo cōsolamine libre z inquibz fuit unc argēti. 9 Reliquas uō libras 12 que fuit ab ipis cetis libris usque in 14 ꝑdē ut ecē de minori moneta. inquibz ser unc 72 argēti. Quibz addatis cui unc 9 iuenit ad dit unc 81 argēti ī summa illi cōsolamins. quibz seruatis unc 6 et nō debemus ee ī tantū 74 et sic erunt ī unc 6 addat' q̄ pōt in sedā ꝑtes libras p minoris monete. s. b 1 plus in ꝓma pone ī quibz libis p fuit unc 12 Inreliquas uō libras. 11 que fuit ab ipis libis p usque in 14 fuit unc argēti 66 quibz addatis cui unc 12 argēti q fuit in p libris minoris mone. inuenit unc 78 argēti tot cōsolamine. Inquibz seruat unc z et cui nō debemus ee ī tantū 74 et sic erunt





adhuc cū unc̄ .2. addat. Impma em̄ ꝓpōne sup fuert unc̄. 6 insdā 2 ℔ 1 libr̄ qua accreuim̄ dminori monetā insdā ꝓpōne. adppinquauim̄ uerā & sat' dilectā que & abijs 6 unc̄. usque impīs unc̄ 2 que supstit' desdā ꝓpōne. & dicet sdā ꝓmā ꝓmodū ꝓlibra una qua creuim̄ insdā ꝓpōne adppinquauim̄ ue rā unc̄. 2 argenti. quid adcrescā sup ipām sdam ꝓpōnē ut ad ppinquē alias 2 unc̄ que desunt adppinquationi mlta & 1 ℔ 2 dnm ert ℔ 2 erūt libre 1 qua addita cū libris ℔ sdē ꝓpōnis. fiunt libre 4 tantū opportune eum mittere dminori monetā. Reliq̄ uō. s. libras 10 dminori. in quibꝫ sūt argenti unc̄. 74 unc̄ utrūq; mo netā ut oportet.

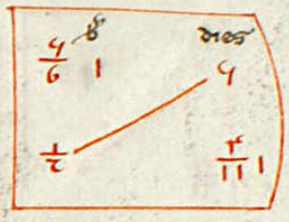
De eodem.

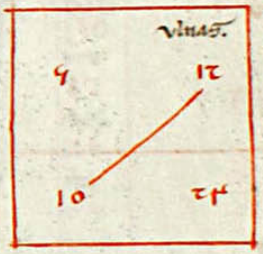
Rursum quidā hē monetā. in cui libra sūt unc̄. 2 argēti. et monetā in qua libra sunt unc̄ 2 et monetā in cui libra sūt unc̄ 6 et mone tā in cui libra sūt unc̄ 7 argēti. cuius cripis quatuor monetis ꝰ solare libras 20 adunc̄ ½ ℔ mlta ꝓmi libris 20 ꝓmc̄ ½ ℔ valen tis unc̄ 90 que dete ēē millis libris 20 dm̄ mitte dminori mone ta impsēpto cōsolamine quātū uis. ut ponam libras ℔ in quibꝫ sūt unc̄ argenti & arcē cēthe ipis libris ℔ tripis libris 20 cripis unc̄. & dcis unc̄ 90 remanebunt libre 16 adcōsolandū dereliquis tribus monetis. In quibꝫ dcm ēē unc̄ & 2 argēti .s. & min̄ dcm̄ 90 post h ponet mete cōsolamine adlibrā dminori monetā. ut dicam̄ libr̄ 1 in qua sūt unc̄ 7 argenti. remanēt libre 14 duabꝫ reliquis monetis. adcōsolandū adunc̄ 74 argenti unc̄ utrūq;. hoc ē adunc̄. 4 argēti ꝓ libra. que cōsolacio ꝓ elchatneym ꝓcedenti quēdone constituo. qua cōsolationē erūt ꝓdicti modi minuendi sim̄ et eueris errores ꝓmum ꝓpōnē sdam .s. 6 ℔ 1. ℔ et cripi mlatione que ē 2 ℔ cripis mlationē sc̄e erroris inpōnē ꝓmā .s. 9 et residuū .s. 14 diuersis ꝓdictam errox que ē 2 erūt sibi 14 minoris monete. Reliq. 10 mittentur dminori utrōdiem. ℭ De laboratore qō nomibꝫ

Quidam laborator erat receptus bis 7 in se si laboraret. tsin. debet reddere b ℔ dno opis. ad rationē unius mensis. qui quidē laborāt. quā ñ. ita quod expleto mēse debuit recipe a dno opis b 1 queritur quot diebus expō mēse laborauit. Ponet quidē ut ipe laboret diebus .20 et quod inreliquis diebus 10 n laboraret. Vñ pipis 20 dies debuit hre duas tertias teh bis 7 .s. b ½ ℔ cū dies 20 sint ½ unius mensis. 7 pillis diebus 10 in quibꝫ n laborauit. debuit reddē dno opis bis ½ 1 .s. tertiā ptē debis. ℔ quo libis ½ 1 erūt debis. ½ ℔ luc. remanet plucro bis ½ 2 qui uellet cū ēē bis 1 utrū ipm quē lucratus fuit. Vñ ex hac pma ꝓpōne ertauim̄ in bis ½ 2

addinf. Qr̄ mutabit aliam p̄tionem inqua ponet ad libitum
quod laborauerat diebz 14 fiat 4 min' qui mpma p̄tione. 7 remane
bit alii diei 14 quibz nō laborauit. Vñ ppis 14 diebz inquibz la
borauit. Vbinā habere bīz ½ z .s. dimidiū de bīz 7 cū ipi diei 14 sit
dimidiū mēsis. 7 preliquis diebz 14 quibz nō laborauit. debuit red
dere bīz 7 quare dbinū recipe tātū b ½ 1 g̃ inhac sedā p̄tē sup
nob' bīz ½ er mpma supplenere bizāt ½ z Qr̄ sup sedā modū oppri
mis mihi errorē pmū ppōne sedām. s. ½ z p 14 remanet dies
z 4 sibi mis errorem sedā ppōnis pmā. s. ½ p 20. er diei 10 quos
exhendū 24 remanet diei 24. quos diuide p 7/6 1. s. pdictum ertor
que ē a ½ usq; ½ z exibus dies 7/11 17 inquibz laborauit quos extrahe
re diebz 20 .s. demēse remanet dies 5/11 16 inquibz nō laborauit. Et sic
patet p̄ chatlieym oīs questionis unicam explī solue.

Et arbor cui⁹ ⟨illegible⟩ later sub terra. 7 sup terrā sit — ½ ½ de ārbore
exipā ulne 20 Pone quide ut longitudo ipius arboris sit aliqua nūs
quitatis. q; mīm quinis. ad libitū pone possis. tm cō sitatore tales
ut ponas eūtalem. 7 in quo reperias ½ ½ Et hoc itē intelligas de reliq
p̄tionibz aliarū questionū. ut semp pmas exmōstra ita ut ipis in ue
nīatur rupta quinecessaria sit inquilibet questione. Ad nos insequē
tibz questionibz ponendo ipas mōstrabimus. Pone ergo ut illa
arbor sit longitudine duodecim ulnax. exquibz cū sit ½ ½ sit sub
tra scat ulne 7 remanet sup tā ulne. 4 quelleī ee 20 qr̄ phac p̄
tionem deinam auītare ulnas 14 qr̄ insedā p̄tione p̄t plongitudi
ne ipi arboris ulnas 24 scat ulnas 12 pquā ipma p̄tiat. Exquibz
exta ½ ½ ipix. scat 14 que sit sub terra. remanet sup terrā hulne
24 que cū uelleī ee 20 simi⁹ longe auītare ulnis 10 In pma cui p̄
tione simi⁹ longe auertere ulnis 14 Insedā 10 g̃ p ulnas 12 quas
exinim insedā p̄tione adppinquauim ulnas 4 7 remanet ad adppin
quādū ulne 10 qr̄ mīs 10 p 12 diuide p 4 exibus ulne
24 quas adde cū ulnis 24 sed̄ p̄tois redde 48 plongitudine toti
arboris. Potes cui pportiones similiū questionū scire. sedā mod
negociationū quē in octauo hui⁹ libri explō demōstrauim. ut cogno
scas meli⁹ quos mōs miscere exp quē duuis debes ubi gra. pone in
una linea ulnas 12 quas insedā p̄tē sic longitudine arboris exi
mi. 7 ulnas 4 quas p̄pās ulnas 12 adppinquauim uerticali. 7 ulnas
10 que restāt ad adppinquādū. ponet sub ulnis 4 scaleā adppinquā da
sub adppinquata. ut sic simile reo sub simili re ut hic ostenditur. Vñ
cognoscis quod debes miscere. 12 p 10 quia sic exduplo. 7 debes diui
dere p. 4 ut p̄dixim. Et nos semp in sequētibz ponem pportiones in





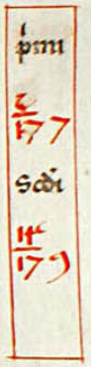
hunc modū. nec adamnice ueritatis possis mutilatū tenere.

Qvidam retinuit de hoc retro in ob sequo

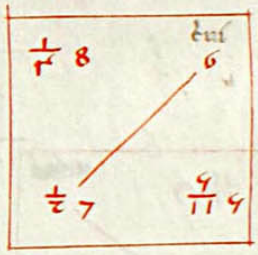
quendā mobilequum. cui debebat dare inter se tres mios quibz
erat ordinē uni maior alio z minor tertio pditione qui cū labora
ret diebz 6 dedit illi dns opus dimidiū pmi mii. et tertiā scdi et
quartā tertij. et sic recte psoluit sua. Queritur quid mii fuerit illi.
videat quis quot ponē tres mios ordinē. quoz unus sit maior alio z et
pmi possit duodi integraliter. z sedo p z tertio p sedo hoc q dns psoluit
ei. Sumtp 16 et 18 et 20 et accipe dimidiū pmi mii scil' 8 et tertiū
scdi. 6 et quartā tertii scil' 4 adde insimul et erūt 18 et tot recepisse
ille. si 16 et 18 et 20 recte illi mii quos dns ei dare pmiserat. qz
uidet quod dns accidit illi recipis tribz miis et tertiis 10 miliis 6 diebz
quod sic intendū e. qua dies 6 sūt quinta pars mensis. Accipe quintā de 6 p
que summa illoz. iii. miioz erubuit 4 12 pquibz habuimus dicit 18 sic
cū pma positione erimus cū 4 6 additis hoc e cū quinis z 1
qz sedā positio minor ponenda e. inqua tres alios miios adhoc aptos.
quoz unus sit maior alio z ponē tutetis erūt 4 et 6 et 8 dnis acc. dns
idiū pmi mii. s. z tertiū scdi. s. z et quartā tertij. s. z erunt 6 et tot
recipisse ille, pquinta pte de 28 qsus sumatur 4 erit 8 et de 6 erit 10
cui quinta pars sūt 2 4 aquibz usqz in 6 remanet 3 additis pscdo errore.
Cū milia z 1 s. pmū errore p 4 silicet p pmū mium scdo positionis erit
12 4 et milia z pcrore scdo p 16 silicet p pmū mium pme positionis erit
22 et sic habes 12 4 remanet 9 2 qdoude pdifferentia erroz. s. p 2 4 qsus
ad 2 usque m z 1 et habeb 4/29 z pmo mio. cui. scdo e 4/29 4 tti 4/29 7
Qu ue tractu pte duodeci cepi pam regulam demostrauim
Vo hoies habebūt dns. De duobus homuib; hnātib; dr.

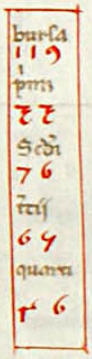
quoz pmus queritur scdo 7 z pmus se habere quinquies tantū quātus. Et scdus
queritur pmo 4 et pmus se habere septies tm quātus. Queritur quantas
dr dnos uni cuiqz ponendo ut pmus habeat 8 cui quibz additis 7 qs
queritur scdo faciūt 14 qd 14 teterrime et quincuplū tedrius quirremanet
scdo. qui scdo remanent z dans illis 7 dr pmo. et oportet quod ipse habeat 10
quicū accepit 4 et eorū pmus qui hūt 8 habebit scdus 14 et pmo remanebit
z que 14 tetigit e 21 scil' septuplū de dr z quirremanet pmo hoi. et in hac
positione scdus hō hēt dnos 6 mii qui tetigit. qui ponet in scdā positione
alium talem mium. cui quo cū additis fuerit dr 7 faciunt mium quidruplū
p 4 integraliter. sumtp 12 qsus 4 plus pme positionis. cui quibz additis dr 7
quos tenet scdo 20 quinta quoz pars. s. p oportet quod remaneat scdo.
scdo. cui quibz additis dr 7 quos tetigit pmo. reddit 11 pdrius scdi hois
cui quibz additis dr 4 quos tenet pmo quinis 12 pmo remanebit 8 tetigit

habebit 16 que 16 debet ee 46 .s. septuplū ꝺ dī. 8 qm remanet ꝑmo hoī. vñ in hac sedā ꝓtione sedet hē 40 mīa quā tetigit. et quia ꝑma ꝓtio fuit ꝑ uerum quā sedā tetigit de sedā ꝓtione ꝑmā. et ꝑmā sedam. ut semꝑ sic sedā ꝓtio ꝑ uerū. et sic in ꝑma ꝓtōe sedā habebit 40 mīa quā ꝺ beat. et in sedā 6 & ꝑ 4 quos minus in sedā ꝓtōe ꝺ ꝓpinquiꝰ uerū 4 et retinet ꝺ ꝓpinquā ꝺ 6 qē mit 6 ꝑ 4 et remittet ꝑ 4 hoc ē ꝑ situationis modum 4 ꝑ 4 et remittes ꝑ 17 et habet 15/17 quos et habe de dī 8 sedē ꝓtionis. remanet 2/17 7, ꝺ ꝑmi hoīs. dīm ut haberis dīos sedi. adde 7 quos ꝑmi ꝑtet sedō sing 2/17 7 et ꝺ 14 et 2/17 et tūc sing quīta ꝓtē eoꝝ que ē 14/17 2 adde ipsi dīos 7 et ꝺ 14/17 9 et toc huīc sedī ꝗ inter tria ꝓtē duodecimi capti ꝑ regulā ostendimꝰ. Nam singulorum qualiquīlibet ꝺ 2/17 14 ꝑ tis acque tetigit. duplicā ꝺ tūc toco. ꝑmū quidē ut tetigit septimas decimas de dī 2/17 14 hoc ē mī 14 ꝑ tua regulā sciꝰ 17 et ad dat 2 et fiūt septime decime 240 de quibꝰ acque quinte et septime de came 48 et quibꝰ 48 fac integra. et fiūt integri 14/17 2 vl' alie acque quīte de 10 eī 2 et de 2/17 4 que remanet fac septimas decimas et fiūt 70 quoꝝ quinte pars ē 14 et sic habebis 14/17 2 ꝑ quīta ꝓtē de 2/17 14 et sic ꝓpositū modo solue questiones que sunt inter tria ꝓtē duodecim capti.



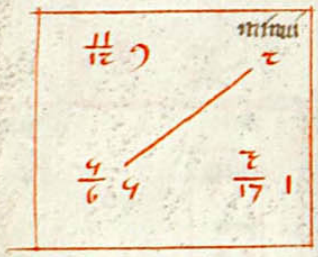
Quatuor hoīes dīos de quatuor hoīb; q̄ tenebāt burlī habentes tenuerūt burlī dīoꝝ. equibꝰ ꝑmi dixit. quod si haberē dīos burse. haberet bis tantū sedō. sedē si haberē burlī. haberet ter tantū tertii sicut habet. habet quidē tanto quanto. Quartus quilibet tm ꝑmo. quere quot dīos habuit quisq. Pone quidem quod ꝑmi habet dī 9 et ē burli sine dī 21 & ꝑmi huīc burlī. habebit 30 vñ cū hē triplū sedō. oportet quod sedī habeat duplum ipi .s. 14 cuiquibꝰ addatur dī burse .s. 21 fiunt 56 quoꝝ tertia ꝓtē .s. 12 habebit tri. cui sedī cū burli: habeat triplum ipi. cuiquibꝰ 12 addita burli faciunt 22 quoꝝ quarta ꝓtē .s. 1/4 8 hē quartus. cū quibꝰ habita burli .s. 21 fiunt dī. 1/4 29 que tanta ē 4 .s. quintuplū dī ꝑmi hoīs. & quarto hoī minuta 2/4 14 sedī dutta ꝗ ē .s. 1/4 29 usqꝫ 4 qē in sedā ꝓtione augebit dīos aut minuet dī. ꝑmi hoīs. augenti itaq dīos burse. et ponatur quod tanta sit ē dī 27 sedī 6 plusquā in ꝑma ꝓtione. quibꝰ addatur cū dī ꝑmi hoīs sedī cū 9 fiunt 36 quoꝝ medīa .s. 18 hē sedē. cuiquibꝰ addita burli. faciunt 44 quoꝝ tertia ꝓtē .s. 14 hē tertius cuiquibꝰ addita burli. fiunt 42 quoꝝ quarta ꝓtē hē quartus .s. 1/2 10 cū quibꝰ addita burli erit dī. 1/2 27 quod debet ē 44 .s. quintuplū ꝑmi hoīs vñ in hac sedā ꝓtione minuet quarto 1/2 7 sedī differentia que ē .s. 1/2 27 usqꝫ in 44 in ꝑma uō ꝓtōe minuit 2/4 14 & ꝑ ser quos creauimꝰ in sedā ꝓtione





burse. ad ppinquauiū ueritatē. ℔ 8 sal' distāt q̄ ē a. 2/℔ 14 usp in 1/2 7 et remanet ad ad ppinquādū ipī drios 1/2 7 qr̄ mlt' 1/2 7 ℔ 6 et diuidet ℔ ℔ 8 ut inde sciat' ostendat'. exigūt' dri. 4/11 4 quibz ad dicat' cū drius 27 .s. siūt sedm ꝓportione. et 4/11 22 et tot siūt repti in burla. sipm' hāt 9 nā ut habeam' in integrū dr̄ burse. homūl mltab ℔ 11 dr̄ burse. ꝑm hoīs. habebit' ꝑdr̄ burse 247 et ꝑdrius ꝑmi hoīs habebit 99 q 247 et 99 cū habeāt addūcat' eīdem regla s. et diuidant' uni quisq; eox ℔ ut habeat' in numeribz minis num eox. quod semp in omnibz similibz facere studeat' debet. et sic habebit' ꝑdr̄ burse 119 et ꝑdrius ꝑmi hoīs 22 quibz insimul iūctis. fiunt' 147 q̄z medietū .s. 76 et quartas drioz sedi hoīs. quibz addit' ordrius burse .s. cū 119 fiunt' 195 quoz tota pars et quātas drioz tōi sal' 64 cū quibz addit' imim dr̄ burse. fiunt' 184 quoz quarta pars .s. 46 et quātas quarta hoīs. cū quibz addit' dr̄ burse. fiunt' 144 qui ē quarta plus dr̄ ꝑmi hoīs ut oportet. Nā sipm̄inuatione dr̄ ꝑmi hoīs. hoc idē reperire desiderem'. pone ut ī sedi ꝓtate inburla repti sint dr̄ 21 uel ꝑma ꝓtione ꝓtate ꝓsilit. et pone quod ꝑmi hō hē dr̄ 7 .s. dr̄ et mīa quā in ꝑma ꝓtione. quibz addat' cū drius burse sal' cū 21 fiunt' 28 di midiū quoz .s. 14 hē sedi quibz addat' cū 21 burse .s. burse fiunt' 24 quoz tota .s. 2/℔ 11 hē tri 9 quibz addas 21 erit 2/℔ 22 quoz quartam .s. 6/7 8 hē quartus. qui uita cū 21 fiunt' 6/7 29 q̄detur eo 24 sal' quintupli dr̄ 7 ꝑmi hoīs. Vñ quart' hō hē mīa quā deberet dr̄. 6/7 4 sal' distāt. que ē a 6/7 29 usq; in 24 et in ꝑma ꝓtate huius ut̄ quart' homo mīa erit. 2/℔ 14 ℔ ℔ 2 quos minuam' dedit ꝑmi ad ppinquiorem uerit̄ 11/12 9 sal' differētia q̄ ē a 2/℔ 14 usq; in 6/7 4 et remanet ad ppinquādū ipī 6/7 4 qr̄ mlt' 6/7 4 ℔ 2 et diuidet ℔ 11/12 9 et exibit dr̄ 2/17 1 quo erūto dr̄ 7 remanebit dr̄ 17/17 4 et tot habuit ꝑmus Vl' sipsedy modū operi uel reddige errores adsimilia .s. 2/℔ 14 et 6/7 4 .s. mlta eox ℔ 12 cū ipō minō reperiet fractus eox et habebit' ꝓmo errore 189 diminuta et ꝓsilit 70 silit diminuta. Et mlta ꝓtione de 70 in 9 .s. sedi erroris inpotatis ꝑmā erthe ermlcatā ꝑmi erroris inpotione sedim .s. de 189 in 7 et quod residuū fuit diuide ꝑ differēm erroz .s. ℔ 119 exibit silit ꝑdr̄ ꝑmi hoīs 17/17 4 et si mīa integrū dr̄ ꝑmi hoīs reducē uoluit mlta 17/17 4 ꝓruptū siue ungule .s. ℔ 17 erit 99 et mlta dr̄ 21 sal' burse ꝓueniet 17 et 247 ut sup̄ iuenim'. quibz sal' 99 et 247 diuidit ℔ 2 stabit reddit' simlr ꝑdrius ꝑmi hoīs 22 et ꝑdrius burse. 119.

Vnmque hoīes bīz. habentes d' quq; hoīb; q iuenerūt equū. equū emere uoluerūt equibz ꝑmus ꝓtie sedi dimidiū bīz. suoz. et sedus ꝓtie tcio tui. et tci ꝓtie quarto. quātī. et quartus ꝓtie quito.



1 f 6

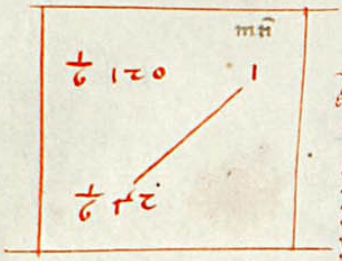
quintum . et quinc' similit' petit p̄mo sexta' suor' vic'ac'. Et sic
unus quisq; p̄mit ip'm equu' emere. Quer' quot vic'es unus que-
usq; hui'. et quod fuit p̄tium equi. pone quide' ut p̄m' hat vic'
12 et equus valeat vic' 20 Q̄r' sed's habebit. 14 . s. duplu' diffe
que' a 12 in 20 qua sic' p̄mus 14 p̄mi habet dimidium sat' 7
sicut petit sc'do cui' sunt vic' 12 habet p̄tiu' equi scilicet b' 20, ip'e eadem
& tci' habebit 18 . s. triplu' differe que' a 14 usq; in 20 et quartus
habebit 8 sc'l' quadruplum differe. sc'a 18 usq; in 20 et quintus ha
bebit 60 sc'l' quintuplum q; differe que' ab 8 usque in 20 cuiq;
vic' 60 si addideris sexta' parte' vic'. p̄mi hois sc'l' 12 habet vic' 72
qui debebat' eo' 20 . s. p̄tium equi. Q̄r' mihi hac p̄ma p̄itione suppe
quito hoi vic' 42 Vn' oportet ingredi p̄itione' aut mutare p̄tiu'
equi aut vic'. p̄mi hois. dicatur' p̄mi hois p̄tiu' equi et ponam' ip'm 21
. s. 1 plura' imp'ma p̄itione. Vn' cui p̄mi hat 1 12 sedes habebit 16
Q̄r' et tci' habebit 14 et quartus habebit 24 . s. 2 pl' p̄tio equi. Q̄r' oport
ut quintus ho' hat debitum equo quarto ho' petit quitu'. hoc est quod p
terit emere equu' et reddere. quito hoi vic' 2, p quitu' p̄te sui debiti. & quit
hi debitu' vic' 14 tequibz petitis vic' 6 2 . s. sexta p̄te vic' p̄mi hois. re
manebit eide' quarto hoi debitu'. vic' 5/6 12 & ut ip'e hi p̄tiu' equi.
minuit ei vic' 5/6 12 et unius p̄tiu' equi. q; sunt unius' vic' 5/6 22 Imp'ma
ergo p̄itio supauer' quinto hoi vic' 5/6 42 Insedi minuit ei vic'
5/6 2 2. Vn' cognoscat' quer' p̄tiu' equi & inter utramque p̄itione'.
. s. ant' 20 et 21 Q̄r' dicit, p̄nob' 1 q; tertia sup p̄tium equi. minui quito
hoi vic' 6/6 42 qui sup auert ei imp'ma p̄itio. et vic' 5/6 22. qui sup auert
ei insedi. p̄itio. hoc est unius' vic' 76 q; sup. addi p̄me p̄itioni ut
tiu' minuat' vic' 6/6 42 Vt quid ex hac tertia p̄itione ut. ingrediat'
ip'i quito hoi vic' 5/6 22 qui minuit ei insedi p̄itio.

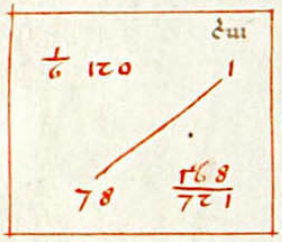
Q̄uare si mlt'auerit 6/6 42 p 1 et diuidet p 76 oportebit ut hoc
quod. in colligeris addas sup b' 20 p̄me p̄itionis. et si mlt'auerit 5/6 22
p eide' 1 et diuidet p eide' 76 oportebit ut hoc quod in ex'erit. ex hac
aur debis 21 sede' p̄itionis ut milies et ex'ie p̄m p 21 p̄itio sedis. s. 1/6 42
et ex'ie sedis p̄itionis p̄mi. s. 5/6 22 p 20 et adde hac mlt'ationes i
unu' erit 6/6 1477 q; dic inde p quitu' ex'ie. s. p 76 et sic habebis
p̄tiu' equi p̄qualis' uolueris modu'. quod p̄tiu' est vic' 1477/76 20 sc'd p̄tiu'
integru' habere uolueris. milies 20 p sua' unitat' scilicet p 76 et adde
42 sup 6 et adde 1 erit' 9577 et tantu' valet equus. & simlr vic' 12
p̄mi hois p eande unitat' scil' p 76 p 6 habet' vic' p̄mus hois. si ei
9577 integrali p 12 diuidatur diuide ip'a p 12 exibit p̄tio equi
6/6 721 et milies tantu' ter dena' p̄te' exeuntis 12 . s. 1 p̄tis 76 et p 6

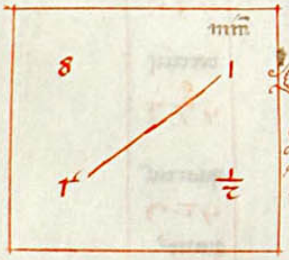
p̄tis	
1 4 6	
sedis	
4 2 0	
tertius	
4 7 7	
quartus	
4 2 0	
quintus	
6 4 4	
equus	
7 2 1	

et habebis $\frac{468}{721}$ primi hois. Vñ seqũt huic 420 tertii 472 quarti 424 quinti 646 Ad sup̃mutationem primi hois hoc idē reperire uolui. Nu $\frac{646}{721}$ qui sup̃ant primo quinto hoi impma p̃tione. et p̃ q̃ primi hab̃ biz 12 scat 1 mīa qui sup̃ma p̃tione. aquibz usq; impleū equi. s. 20 deficit 8 quoz duplum hē seqũs. sunt 16 q̃r tii hē 12 et quartus hē 22 quieti hab̃ 12 plus p̃mo equi. oportet ut ipi biz 12 sint quieti debiti quinti hois. & quietus hō hē debiti biz 60 equibz extract biz 2 scat sept̃e p̃te biz primi hois quos querim. remanet et debiti biz 48 & in hac sedi p̃tōe minuit q̃nto hoi ipi biz 48 et insup̃ plum equi. s. insima b 78 & p uno quod minuim̃ in sedi p̃tōe primo hoi. minuet quinto hoi biz $\frac{1}{6}$ 42 qui sup̃ant impma p̃tōe et insup̃ biz 78 quminuit et in sedi. hoc & insima biz $\frac{1}{6}$ 120 q̃r dicet, primo quod minui in sedi p̃tione primo hoi minuitur quinto hoi $\frac{1}{6}$ 120 quid minuam ex sede p̃ma p̃tione ut tm minuant quinto hoi $\frac{1}{6}$ 42 mt $\frac{1}{6}$ 42 p̃ reddunt p $\frac{1}{6}$ 120 hoc quod exierit extrahes de biz 12 p̃me p̃tionis. residuū uō erit q̃ntitatis biz primi hois. ul dicet, primo quod erat in sedi p̃tione crescet quinto hoi biz $\frac{1}{6}$ 120 quid accrescam sup̃ sedim p̃tione ut tm augeant quinto hoi biz 78 quid minuit et in sedi p̃tione. mitt & 78 p 1 reddit p $\frac{1}{6}$ 120 habuit $\frac{468}{721}$ quibz addatis ea biz 12 sede p̃tionis reddit biz p $\frac{468}{721}$ 12 q̃ quantitates bigas primi hois. ea p̃tia equi fuit b 20 Nam ut redigam̃ eas in integrū. mitt biz primi hois p 721 et sic habebis p̃quantitate p̃mi hois biz 9120 que erit ermitate de 12 in 721 eiid dictione de 468 que fuit sup̃ unglam. et p̃ eo equi habebis biz 14420 qui mit sed 9120 et 14420 ea habent adinuicē undecimā diuidatur uterq; numer p 20 et sic habeb, p̃quantitate p̃mi hois biz p 46 et p eo equi biz 721 [illegible] de hoie qui uult negociādo lucrum

[illegible] negotiando lucra. tam florenta. et venetias et pisas. et fecit in una quaq; ciuitate duplū. et in una quaq; expendit dī 12 et in fine nil remanit ei. Querit quot in principio habuit. Pone quidem ut p̃ habuit dī 12 ea q̃ubz in p̃ma uiagio fecit duplū. et sic habuit dī 24 quos expendit dī 12. et remansit ei adhuc dī 12 ea quibz ea fecit duplū in reliquis duobz uiagiis. et expendit in uno quoq; dī 12 remansit ei in fine dī 12 Q̃r in hac p̃tione erratis in 12 addatis & p̃ quod p̃ habet dī 11 eaquibz ea fecit duplum in p̃is tribz uiagiis. et expendit tm in quoq; dī 12 remanet ei in fine dī 4 scat 8 mīa quam in p̃ma p̃tione. Q̃r hec p̃tio maior est. Vñ dicet p 1 quod minui temporale ipi adp̃inquiam & quid minui inter ut adp̃inquiet 4 mitt p 1 reddunt p 8 erubic $\frac{1}{2}$ uni dī. q̃re 11 dī extracto remanet p̃cipitale ipi dī $\frac{1}{2}$ 10 Vl ermitate erroris primi in p̃tione sedim. s. tei 12 et hec







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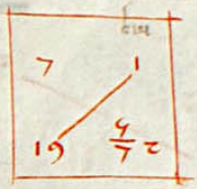
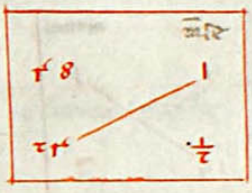
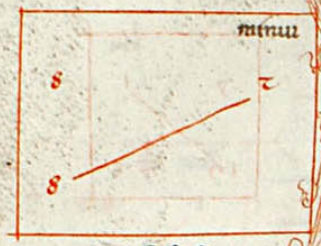
p 8 ꝫ pro uenit̄ ereditor sed in portionem p̄mam remanet 8 p̄ ꝫ
manifesta differentiam erroꝝ uenit ½ 10 Nam si ponat̄ quod ipe hēat.
12 cū quibꝫ tria fecit uiagia. et quemlibet quotiens uoluit ꝙ eq̄ expendat̄
cū infine ei nichil remaneret. Pone quod expendisset tot̄ 10 et duplicet
tociens ꝫ ita expendendo semp̄ 10 et remanebit 6 Q̄ ½ primo
minor ueritate. 6 Vñ, pexpendio ipi p̄mo 11 in sedā portione-
rem eq̄lem ut tenet. inuenies quod remanebit 1 19 & 7 minus
quā in p̄ma portione. Vñ dicet̄ ꝙ 1 q̄rem in expendio ipi. ꝙ min
quam ueritas 7 Q̄d rursus adderet ut adꝙnquet̄ ipi 19 qui
restant ad adꝙnquendū in sedā portione. ad hoc ꝙ 1 ꝙ 19 diuidet̄ ꝙ 7
habebit 2 ½ 7 quibꝫ additis ei 11 sede portois reddit 13 ½ 7 per
pendio ipi ut reductis 6 ī 11 ad similē ductū ꝙ 19 ī 10 remanet 9 6
que diuide pdictum errorē habebit 1 ½ 7 de hoc Q̄ debat pensione
sua debat pensione in anno lib 20 ℔ sol 40 ī mense q̄ pretendit dñs
dom̄ lib 6 sup̄plum pensionē aduisum ꝙ debeat ꝙ libet ī mense. Quer
si mensibꝫ ipe debuit tenere domū ꝙ pris libꝫ 6 et ꝙ ultimus ꝓe ut
ipe tenet q̄m dom̄ mensibꝫ ꝙ inquibꝫ expedierit ei dare ꝙ pensione lib
10 et ultimi illaꝝ 6 libraꝝ mille ꝙ mensibꝫ & sol 8 hoc debuit dare lib 6
et sol 8 mille ꝙ mensibꝫ debuit dare ꝙ pensione lib 10 sed sol 72 plusq̄m debuit
debuit. quare ponet̄ utrū tenet̄ tenet dom̄ in sedā ꝓtione mensibꝫ et inq̄bꝫ
debuit recup libraꝝ 6 sol 6 nec cap ultimū et debuit dare ꝙ pensione lib
½ 7 sed sol 24 plusq̄m hoc q̄d debuit recipere. Iam in p̄ma portione
fuerit pl̄ sol 72 Q̄ primo mense q̄ tenuit ad ꝙnquendū sol.
48 sed dimidium q̄ & sol 72 usq; in sol 24 et remanet nob ad ꝙnquendū ꝙ
ipi sol 24 Q̄ mit 1 ꝙ 24 diuidet ꝙ 48 habebit ½ unū mensis
de mensibꝫ et sedā portionis remanet mensis ½ et debuit ꝙ pen
dom̄ ꝙ pris lib 6 verbi gr̄ ultimus debet 6 mille mensis ½ et
q̄ quibꝫ nichil ultra debet 6 debuit lib 6 ꝙ 4 q̄ debent ꝙ pensione q̄libꝫ
mensibꝫ ½ et hoc uolumꝰ.

Vidi dici quida nauē adnaulū tis 11 equali ꝓtio ꝙ
clerio tis 1 ꝙ statuto naulo. et naucleri reddit ei sol 14 ꝙ hoc q̄d val
uit plus naulo. q̄dā nō qui duxerit mentē nauē tis 14 et ē ꝓtio reddit
simili naclerio ꝙ alio naulo tis 1 naucleri reddidit ei sol 6 Quer ꝙ pti
um unī cuiꝙ tisag et quid deuno quoq; tisagio daretur naulū. Pone ꝙ ꝙ
naul unī tis ccc sol 6 Q̄ ꝙ nō debuit dare naulū desiuꝰ 11 tis f 66
cū ꝙ addit f 14 quos naucleri reddit ei et reddit 80 ꝙtio unī cuiꝙ tis.
sed nō debuit dare naulū q̄libꝫ 14 tisag 90 Q̄ ratione quibꝫ id
dit cū sol 6 quos naucleri ei reddidit reddidit 96 ꝙtio unī cuiꝙ tisag
tis. quisq; sol 16 pl̄ ꝙtio tis ꝙm hoīs Q̄ minuatur naulū ratione ꝙtis.





Quintoe naulū de 11 fās p̄ hoīs & sol 44 cū quib⁹ addit sol' 14 stis



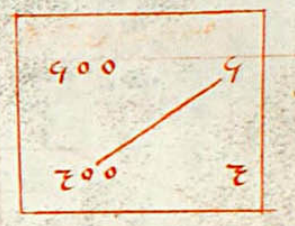
naulus fascis
7
p̄mū fascis
26

er ponatur grsit sol' ut sup 4 hīs. reddūt ꝑ tuo fascis sol' 48 Malum uō tegis 14 sedi hoīs & sol' 60 cū quib⁹ addit⁹ sol' 6 quos nauclerio reddidit ei. reddūt ꝑ tuo sui fās sol' 66 sat' sol' 8 plus ꝑ tuo fascis p̄mi hoīs & insedi pōtione ꝓ illis sol' 7 quos minuim⁹ de naulo cuilibet fascis. adꝓpinquauim⁹ dillim q̄ & a sol' 16 usq; in sol' 8 q̄ differentia & sol' 8 er restant nobis ad adꝓpinquandū alii sol' 8 cū militibus hīs sol' 7 ꝓ sol' 84 restāt ad adꝓpinquandū. ~ diuides ꝓ sol' 8 adꝓpinquat⁹. erūt alii sol' 7 quib⁹ extractis & sol' 4 sede pōtionis. remanet sol' 7 ꝓ naulo unuscuiq; fās. q̄s mit ꝓ fās 11 p̄mi. ~ sic addemultiplicatis & sol' 14 q̄s nauclerio reddidit ei. reddūt sol' 26 ꝑ tuo cuilibet fascis. Vn̄ gn̄. naulū de 14 fās sedi hoīs & sol' 70 cū quib⁹ addit⁹ sol' 6 et nauclerio. ~ reddūs reddūt simulit sol' 76 ꝑ tuo unicuiq; suor fās. ut oportet

Et hoīes habebāt dr̄os. exquib⁹ quilibet ꝑ ordinē sine p̄mo habebāt dr̄os 74 sine secūdo dr̄ 70 sine tcio. dr̄ 67 sine quarto dr̄ 64 sine quinto dr̄ 44 sine ultimo dr̄ 40 queris q̄s unicuiq; hūm. ponat ut ipi habeant dr̄ 80 cōquib⁹ extractis sex milib⁹ ꝑ ordinē ꝑceptis. remanet p̄mo hoī 74 secūdo 10 tcio 17 quarto 16 quinto 26 sexto 70 quib⁹ insimul uectis faciūt dr̄ 100 sc̄t dr̄ 70 plus pōita summa. Vn̄ cognoscim⁹ ipz summā ee minus magnā. q̄ ponam⁹ ei insedā pōtē 1 minus. s. 79 et quib⁹ extractis sex milib⁹ ꝑceptis. sat' 74 et 70 et reliquis. remanebūt p̄mo hoī 4 secūdo 9 tcio 17 quarto 14 quinto 1 74 sexto 79 quib⁹ insimul uectis. cū faciam⁹ 9 4 s. 14 plus pōita summa insedi pōtione. cognoscim⁹ rez q̄m summa adhuc maior ee ueritate. Impima pōtis sum⁹ longe 70 insedi 14 & ꝓximū dr̄iū q̄e minuim⁹ adꝓpinquauim⁹ ueritem dr̄ 4 qua rē nolum⁹ adꝓpinquare ipōi dr̄os 14 quare stante adadꝓpinquādū. Vn̄ mit 1 ꝑ 14 ~ diuides ꝑ 4 exibit dr̄ 7 quib⁹ diminutis dr̄ 79 sede pōtionis remanet ꝓsumā dr̄. illos 6 hoīm 76 tequa extractis ꝑ ordinē sex milib⁹ hīs. remanet p̄mo hoī dr̄ 1 secūdo 6 tcio 9 quarto 17 quinto 11 sexto 76 quib⁹ insimul uectis. reddit ipam ~ tē summā 76 ut oportet. De duabus aulis

Ve auct erāt sup altitudinē duop turriū. quarū una erat alta pedes 40 altera 70 et distabāt insolo pedes 40 ~ uno ictu descendēt pari uelocitate ad certū cuidā fontis. et pariter uno momento adipm deuenerēt. quarū erat ime uelocior turris. Quod uno momento moueri. ~ uno momento uinceret. mihi aliud e. ut quod recte lineā descendit assimilatur turriū usq; ad certū fontis. sint adiunctē equales. quare sic ingens meatus ꝑpendicularis ostenditur. multo longitudinis. cuilibet illaꝝ turriū insistēti. addita omni latitudine spatii soli. q̄d e abipa turris usque ad certū fontis ipi. sumit quattuor milliaria recte lineā insistēti que descendit ad centrū fontis.

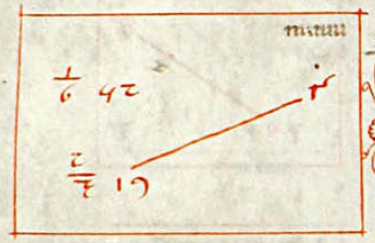
usque adaltitudinem ipi turris. Inf itaq; cognitu. pone utcentru
fontis distet amaiori turri pasibz quinquies.ut dicam 10 milia 10 inse
erunt 100 adde 9 milliatione altitudinis maioris turris inse ipa. fiat 1600
erunt 1700 que adde que serua. remt residuu spatii. s. 90 inse ipi
cui sunt distata centri illi adminori turri. erunt 1600 que adde cui
milliatione minoris turris inse fiat cui 900 fiet summa 2400 q̄ celeb ee
1700 sicut fuerunt alie due milliationes. & in hac ponte sum longe
uertitur 800 fiat distantia que ea 1700 usq in 2400 qr elonga
bis centru fontis amaiori turri. elonget quide pasibz 4 ultra primam
positione. s. pasibz 14 longe a ripa maiori turri. et milia 14 inse. erit
224 que adde cui milliatione maioris turris fiat cui 1600 erunt 1824
similiter milia 24 ple que sunt distantia centri fontis aminori turri.
fiunt qui 1224 quibz addunt cui 900 .s. cui milliatione altitudinis
maioris turris. fiunt 2124 que teneret ee 1824 milliatione.
Et in hac scda ponte sum longe uertitur 200 in pa cui sum longe
800 & dicas p quinq pasibz quos elongauim centru fontis amaiori tu
ri. adprimaquarum 400 uertitur. quatu cui elongauim ipm centru
a bscate maiori turri ut adprimaquam 200 retinet adadprimaquartu.
milia 4 p 200 diuidas p 400 ecruit pasus 2 quibz addunt cui pasibz
14 reddunt pasibz 18 ecce iam distat fons amaiori turri. Relidua uo spatij
sunt 22 distat aminori turri. Verbi gra. milliatio de 18 inse ipa addita
cui milliatione de 40 inse ipm faciut quatu milliatio de 22 inse ipa ad
dita cui milliatione de 20 inse ipm ut oportet. De tribz; hoibz; hmoi tribz;

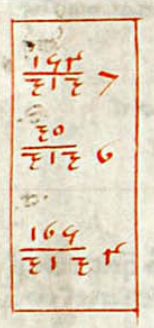


Res hoies hentes tres. quos primus dicat reliquis. dic
sdarec in 7 ceteris dicis. habem utiq; quatu quia uos scis pcte re
liquis 9 appone se habe quoq; tantu quia ipe. Queritur quatu unusquis hu
ppone quide ut primus habeat de 12 cuiquis adde di 7 quos pcte reliquis.
fiunt 20 quor quarta pars sit 4 remanet me scdus. tertius hoiem. du
os illic di 7 primo ergo me utrumque habet de 12 quibz additis cui 12
primi hois. redduntur 24 plima illor trium hoim. equibz oportet ut
scdus habeat 6 habitis 9 de quos pcte reliquis. tertia pars remanet
reliquis. sic habebit quisquis tantu quia ipe. Et accipe 6 reddunt
24 erunt 30 Relidua uo similiter 6 p remanet primo tertio hoi. cuipz
adde 9 quos dare scdo hoi. redduntur 6 12, plima tertii primi hois. equibz
cui primi habente 12 remanet tertio hoi tantu 6 unius di. & reliqui duo habet.
6 24 sit relidua quod & asserto usque in 24 equibz succedentibz tertio
hoi 11 remanebunt ei de 6 12 tertii hoi habebit 6 11 qui tenent
ee 82 fiat septimu reddunt 6 12 qui remanet primo scdo hoi. qr
inhac prima positione minuit tertio hoi 6 71 .s. dimidiu q̄ ea 6 11

dei uo quot reliqs 11 et habet
he hre sectes cum q̄ ipe

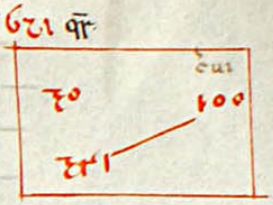
usque in 8 ℔. Cui ponē in sedā positione ut p̄mi hoīs dr 9 s. p̄ unū
qui in ima positione. cum quibz addat dr 7 quos pcio reliquus. fiunt
16 qui cū habeāt tūc quot tantū qui reliqui. oportet ut quarta eoꝝ
sit p̄ hinc ipi. cum quibz addat dr 7 quos dat p̄mo fiunt dr 11 error
habet nisi sedy tertiū hoīem. quibz addat cum dr 9 p̄mi hoīs. redduīt dr
20 pessima illoꝝ trium hoīum. equisq; quisq; seruat. s. 16 oportet ut
sedy habeat. habeat 9 dr quos pcio reliquus. reliqui uō pars sit septa. re-
manet tūc p̄mo hoi que 3 ℔ cum quibz addat 9 quos dant sedy. red
dunt pessima eoꝝ. dr 12 equisq; cū p̄mi habeat. ꝛ. 9 remanēt tūc dr 22
aquisq; usq; in 20 remanet 16 sedy p̄mo hoi. equisq; extat 11 quos dat
tūc remanet eis 4 tertii hoc hoīe habitus p̄mi 11 dr 14 qui deberet ei
dr 24 sibi complū tendr 4 remanet p̄mo sedo hoī. Cui in hac sedi
positione minus tūc hoi dr 19 s. differentia q̄ ab 14 usq; in 24
in ima cui pcio minus ei dr 71 & pdr 1 quos minus p̄mo hoi
in sedi positione. adpinquauim 47 sat differt que ab 71 usque in 19
et retinet addpinquidi upi dr 19 qr mt 19 per 1 duntes p 47
quibz 1 quo extincto tendr 9 sedo positionis. remanet p̄mo hoi dr
cui quibz addat quos pcio reliquus. erit 14 Quoꝝ quarta pars. s. 194
remanet reliquus. quibz addat cui upi dr quos dat p̄mo hoi. redduīt p
eoꝝ sūma dr 194 10 quibz addat cum dr 14 p̄mi hoīs. redduīt
sūma eoꝝ illoꝝ trium hoīum dr 26 equisq; cui sedy habeat quisq
seruat habeat 9 dr quos pcio reliquus. Itaque 4 dr 26 18 quisq; dr
20 18 et retinet. ut dr 9 quos sedy pcio reliquus remanebit sedo hoīi
dr 20 6 Quos addo cui dr 14 quos hoc p̄mi. gratis dr 18 aquisq;
ultimi trium hoīum saluis 6 dr 16 error hoc tertii hoīs.
Quatuor hoīes dr hos habentes De quatuor hoībus q̄ueuerūt bursam
inuenerūt unā bursā dr oꝝ. equisq; p̄mi q̄ dicit ceteris. quod si habeāt ipm
bursā habere cui sunt dr ut tūc qui reliqui sedy quater cūtū. tertii qui
quinq; cūtū. Quartus quoq; sedy tantū qui reliqui. si habuit bursa hoc
affirmat. Quero quot dr uni quisq; habuit. ꝛ quot in bursa reperit.
Quidam quidē p̄mū quinq; pro uni quisq; habere cum bursa: ultima
uero quatuor hoīum ꝛ bursa. Nā cui p̄mi habet cui bursa tertiū qui re
liqui. oportet ut sit p̄mi cui bursa habet 2 ꝛ reliqui uos habeat 1 & me
cui bursa habeat 4 equisq; p̄mi cui bursa hoc 2 ℔ tertii sūme hoīs p̄
mi & sedy ultime sūme cui bursa hoc 5 tertii quoq; cui bursa 6 quarti
hoc cui bursa 7 ultime sūme 1 & cui bursa habere necesse ē. que
sūma sit 70 cui ipo reliqui sedy pareā. Itaque p ordinē ꝛ minu
mi quod p̄mi cui bursa hoc 119 sedy cui bursa 76 tertii 40 quarti
cui bursa 60 sibi 7 et 60 hoc itaque patet. pone ut in bursa repe

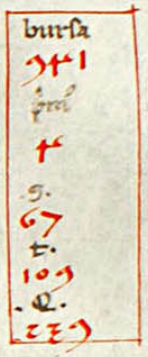




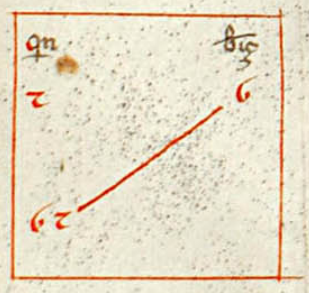
sunt dñi 100 quos equitabe ꝑordinem equitis mūs. remanebūt ꝑdi ꝑmi
hoīs 14, ꝑdi sedi 26, ꝑdi tēii 40, ꝑdi quarti quinq; 60 quinq; q̄libz
nūq; sūmā. adde eī dñi burse. s. eī 100 erūt 1061 qui tenent ee ꝑ 20 q̄
imprima ꝓtione sup̄ distantia q̄ ee a ꝑ 20 usq; in 1061 sat̄ ꝓnes in
sedi ꝓtione ut repiūt inter mūb dñi 200 sat̄ 100 plusq; impmi ꝓtōis.
quos dñi 200 equitabe equitis 14 et 26. adde 40 et 60 remanēt ꝑmo
dñi 114 sedo 126 tēio 140 quarto 160 qui insimul uiuēti eī dñi 200 bñse.
sunūt 764 qui tenent ee ꝑ 20 q̄ insedi ꝓtōis sup̄ma adhuc 241 impmi
sup̄nūert 641 & ꝓpis 100 dñi quos eremus burse. adꝓmquamuis
dñi 200 et retinet nob addꝓmquamdiu dñi 241 q̄ mi 100 ꝑ 241 et
diuidet ꝑ 200 cedūt 117 quibz addūt eī dñi 200 burse. redē, sūma bñse
dñoz 317 quibz equitat ꝑdine. gesus nr̄i tūc ꝑdine remanet
ꝑmo hoī dñi 1/2 1 sedo 1/2 tēio 1/2 26 quarto 1/2 46 quos nūos sūm integrū
hñs uolūt mlta mū quicq; ipoz ꝑ 2 habebit, ꝑdi burse 641 et ꝑmi
habebit ꝑ sedo 67 tēii 109 quartus 173 que in quarta ꝑte duodenū capli
ꝓpm reꝑim inuenim. De quatuoz hoīb; equū emē volentib;

Quatuor hoīes bz. habentes equū emere uolūt. equitz ꝑmi ꝑtē reliq
1/2 sūoz bzoz. et eī sunt bz quos hē, ꝓnt se ipm equū emere sedo ꝑtē re
liquus 1/2 tēii ꝑ Quaer similr ꝑtē reliquus 1/2 sūoz bzoz et ponit ipm
equū emere. Quer quot dñoz unūquisq; hūt. et quot equis uē dare
pone quatem ut ꝑmus hat bz 6 et equus unius bz 20 et sic oportet
bit. ut reliqui tres hāt bz ꝑ 8 uō q ꝑmus ꝑtē reliquus 1/2 sūoz bz. sūs
7 eī quibz eūpe habeat bz 6 habebit ꝑtē equi sūs 20 & sūma bzoz
quatuoz hoīm. erit 4 ꝑ equa oportet tātū dari sedo. ut eī ipe habuit
tātū residuū. habit 20 Qd ꝓtione alteri eschaetcym inuenire pt. Vn
mihac qde et similibz pluref eschaetcym/ necessit. in quibz ñ medicū
sciendū e. Jn hac em et similibz quoīz in uū ꝑma ꝓtione ꝑma unūsq;
lem applicab. sedi uō eī qua quelibet sortiet. sedi unūsq; applicabit. ꝓtio
nes uō reliquoz eschaetcym. ꝓpias ꝓtiones b unicuiq; hoīs repiem ꝑ
ticulares inueniūt de uī ꝓne. ut sedo equis bz 4 ꝑ hūt bz 12 mihac ꝑma
particulari ꝓtōe et eandē reliquis tribz. bz ꝑ 2 equitz eī ipe ꝑtē
est tēii ptes sat 1 ꝑ eī sunt bz 12 habebit bz 26 quelibet ee b 20
sat ꝑtē equi. & mihac ꝑma particulari ꝓtione minuit sedo hoī bz ꝑ .s.
bz. qui in sedi particulari ꝓtione ꝑdo ut sedo habet bz 14 equitz bz 4 ꝑ.s.
bz 2 plus qui impma particulari ꝓtōe. eī quibz addit tēii ꝑtē residuoz .s.
dbz 23 sunūt bz 28 quelibet ee 20 q̄ mihac sedi particulari ꝓtione
minuit. et sedo hoī bz 2 ipma ꝓtōe eī minuit et b ꝑ 2
quos eremus eī. addꝓmquamuis uerum 2 et retinet addꝓmquamdiu alt 2
q̄ mihab 2 ꝑ 2 diuidet ꝑ 2 cedūt alt bz 2 quos addit eī bz 14





fris. erūt 18 ꝛ tot hē sed̄. Alr sine dchatneym viz sedi hoīs rep̄ne
pot̄es. ſuma eīm p hoīm ē viz 4 p eq̄uiz sed̄s hē viz 20 habita
tercia parte de viz eīm reliquoꝝ hoīm. ꝗ remanet eis triz re-
sidui ꝙd ē aviz 20 usq; inviz 4 p sat viz 24 quiviz 24 due.
tie ſunt eoꝝ triū hoīm ee necesse ē cū ipi tres hoies decime sedo
alium tertiam p̄te q̄ inuenient ē nisi equo 24 sine 24 qui nūs
sic īuenīe. ꝙlēa 24 p 24 ꝛ dniidet p 2 eriuit viz 26 p quesito nūo.
ꝗ tot habet ipi tres. residuū uō q ē a ipis viz 26 usq; inviz 4 p sat
viz 18 hē sed̄s. ut p dchatneym m̄ inuenim̄. de nō accedet ad tertiū hoiez.
an ei⁹ viz 4 p tot oport̄et dare. ut cū sup̄ fuor viz hūit quartā p̄te
cuiuoꝝ. habente ipe simili viz 20 sat p̄tū equi. ꝙd p dchatneym
ul̄ p aliū modū p quē viz sedi hoīs m̄ inuenim̄ rep̄ie p̄tes. Vñ quali-
cūq; hoc fec̄is. inuenies quod tci hō habebit viz 22 erit viz 44
aquiz usq; inviz. dfluit viz quiz viz 22 addtis cū viz 18 sedi
hoīs cū 6 p̄mi. fiunt viz 24 aquiz usq; inviz 44 dfluit viz 8 ꝛ
tot habet quartus hō. cuiuiz 8 si addiderit quinta p̄te dr 24 quos
habz reliqui tres hoies. fiunt viz 17 quiuelet ee viz 20 q̄r p̄ma
mutatio p̄tio falsa ē. in qua si to hoī minuit viz 12 quidfluit ab
ipis r 17 ꝛ sup̄m 20 q̄r in sedi mutatio p̄tione augebit p̄tū equi.
ill̄ minuet r p̄mi hoīs augeatur quinta p̄tū equi. sitq; viz 26 equiz
p̄mi hē viz 6 q̄ defluit ei viz 20 ut hāt p̄mi p̄tū equi. qr 20 diuidū
r viz reliquoꝝ triū hoīm ee necesse ē. q̄r reliqui tres hoies habe duplū
erit viz 20 sat 60 quiz addtis cū viz 6 p̄mi hoīs. reddit r 66 p̄ti-
ma illoꝝ trium hoīm equa oport̄et ut sedo habeat 21 tci 26 ut
uniquisq; illoꝝ sine posit ad iplē p̄tionē quoꝝuniquisq; rep̄ie p dchatneym
ul̄ p aliū modū sup̄i demōstrati p quē leui quā p dchatneym ipse
posse rep̄ie cognoscat. quiz nisi inuenit. adde p̄mo eor cū viz p̄mi hoīs
erit viz 42 et tot habet inc p̄mū et tciū ꝛ sedo. aquiz viz 42 usque
inviz 66 sat in ultima nisi hoīm sue viz 18 ꝛ tot hē quarto hō cuiuiz
adde quinta p̄te r viz 42 erit viz 24 22 quidfluit ee 26 sat p̄tū equi
ꝗ in hac sedi mutatione p̄tione minuit quarto hoī viz 12 quidfluit
quinte 62 sup̄ma uō in ultima p̄tione minuente ei viz 12 sat quinte
64 ꝗ p viz 6 quos creuim̄ p̄tio equi adp̄ima quam in uenerat quinta ꝛ
et rebit ad p̄ma quarti quinte 62 q̄r in sedo 6 p 62 ꝛ dniidet p 2
hoc ē 2 p 62 ꝛ dniidet p 1 eriuit r 186 quos adde cū viz 26 sat cū p̄tio
equi sedo p̄tis erit viz 222 Vt sedo regula augmti ꝛ diminutionis
in ista 64 p 26 erraba inc 62 inuenit 20 ꝛ q fuit finis diuide p differ
errox sat p 2 eriuit simili viz 222 quifluit p̄tū equi. qui viz 222 cū
tertio cū regla cū viz 6 p̄mi hoīs. sat 2 diuide unūquēq; ipa



nuo; p 6 er sic habeb 1 ,pbz ꝑm hoꝝ er z7 ,ꝑcio equi cuiquiz fisi
ueris inuenire biz reliquoꝝ trium hoim̃ ꝓchatym uꝫ ꝑuiꝫ mod.
ꝑque sup̃ uꝺ inuenire demostrationi. inuenies qꝛ sch̃ biz ꝛ biz
cioꝝ z4 Quart biz z8 .ue inquisita ꝑte diuersitati aph̃ ꝑmã regulã
demostrauim̃

Tres hoiẽs habebũt libras nescio quot sterlingoꝝ quarũ mediet erat
ꝑmi. tercia erat secti sexta erat tũi. quis cũ uellent in loco tutiori hal̃
quilter eoꝝ sup̃sit fortuitu ereis ad eũ aduentũ deuenissẽt locũ ꝑmi ꝓ
suis incol̃ ½ exhis que sup̃fuerat. sch̃z ½ tci ⅙ exquoꝝ tres ꝓtis
omiũ summa ãi unusquisq; caperet cũ ꝓpe quilibet ipoꝝ summã portionis
habuisse ꝓponatur pone itaq; summã sterlingoꝝ totiꝰ fuisse 12 et quod
exhis ꝓfuerit incommune ½ dequiz ꝓtia ꝓte unusquisq; habuit 1
cũ quo cũ ꝑmi habuisti ½ totiꝰ summe sat 6 ꝙ habebit ipe tc 4 que 4
remanserũt ei cũ ꝓfuerit ½ cõmune exhis que sup̃erant aprincipio.
Quare ap̃pio sup̃erunt 10 quoꝝ dimidium cũ ponerer incommune
remanserẽ ei 4 simili quoq; modo sch̃z cũ ip̃o 1 qd̃ euenit ei qꝛ ꝓ
stitit cõmune habuit tcia summe sat ꝑ dequiz extracto uꝫ 1 remanẽt
½ et cet habuit sch̃z ꝓstquã ꝓfuit ½ exhis que sup̃erant aprincipio ꝙ ½ fu
erũt ½ sup̃rioris sch̃i. Quare tcia d̃ qd̃ cepit fuit ½ ꝑ que ꝓuenit ei
addita medietate de ½ sup ½ ut exemplatione de ½ in ½ diuisis ½ Rur
sus de ⅙ de 12 facte ½ exhis 1 quod tci huiꝰ expẽtis ½ remanet 1
ꝑquo inuenias nũm de quo extracta ⅙ remanent 1 erunt ⅓ 1 que adde
cũ ½ 4 cũ 10 inuenta erũt 7/10 14 q̃ reteret ẽ 12 ut sile exemplum i 7/10 ½ addi
tis. sat' uidetur ½ 7 pone ꝙ 7 addita sub 12 sat' sibi ꝑmi ꝓtis.
Et pone 6 ꝓsumma omiũ sterlinquoꝝ insch̃i ꝓtione dequiz cũ ingrib
ꝑmo ½ exsch̃o ½ exterio 1 ꝙ 1 qd̃ ꝑmi huiꝰ exhis ꝓdictis ½ ꝓtis incõmu
ne exhabent ½ sat' deꝓtione ipi ꝑmi remanet ½ que duplicãt ꝑ
sibi extracto deꝓtione sch̃i remanet 1 cui adde dimidiũ ei erit ½ 1
que adde cũ ꝑ erũt ½ 4 sch̃i habẽt exhabile 1 deꝓtione tci hoiꝝ remanet 0 si
qd̃ adde quinti uenuet 0 quod adde cũ ½ 4 erũt ½ 4 que cũ tcia erũt 6
sam̃ in hac sch̃i ꝓtie erunt cũ 5/10 diminuti. Si ponet 4 diminuti
sub sch̃i ꝓtione sat' sub 6 et mitte errorẽ ꝑmi ,ꝓtionẽ sch̃i sat'
½ ꝑ 6 et errorẽ sch̃i ꝓtionem ꝑmi sat' 4 ꝑ 12 deinde summã ꝓ
missi exerroribꝫ sat' ꝑ 42 et ut euitet mitta ½ 7 ꝑ ½ de 6 et 4 ꝑ ½
de 12 erũt ꝑ 7 que deinde ꝑ ½ de 42 sat' ꝑ 7 exhis ½ 6 ,ꝓsumma omiũ
sterlingoꝝ. 6 er. uel habeat integra mitte ½ 6 er ½ que ꝓfuerit incõ
ꝑ 7 habebis ,ꝓsumma omiũ sterlingoꝝ maretis ꝑ 7 remanet 21 ,phis
ꝓfuerit incommune quare tcia pars sat' 7 extracte de remedietate summe
sat' de ½ 7 ½ remanet ½ 16 quibꝫ duplicatis reddunt ½ ½ ,phis que

sūpsit ꝑmus hō. Jte extrahe 7 extra ꝓte sūpme sat' de 2/3 14 remanet
2/3 8 ꝑ 2/3 sūptōis sedi quibꝫ sr addita dimidia eox reddent marcas
17, ꝓsūptione sedi quibꝫ addunt cū marcis 2/3 fiunt ꝑ 6 quibꝫ extrac
tis remanet summa sat' de ꝑ 7 remanet marca una quā sūpsit ꝑmꝰ hō.
Jte extrahe 7 de 1/6 de ꝑ 7 remanet 6/6 quibꝫ adde quinq eox ut ciet
1 ꝓsūptione cū hoīs ut ꝓdiciꝫ. ꝓtinuī itaꝫ 2/3 que ꝓsumꝫ ꝓsumde. 7
cōmune hīe ꝓpōne ꝓmi et mutare ea tenendo 17 ꝓsima manu
que ꝓpōne.; Inap ꝑs sede fuit quanda dōnū ꝑ eleh in hoc libro d'mōstrū

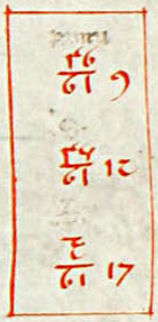
De hoīes habebant dros. te nō sunt ꝑs regis

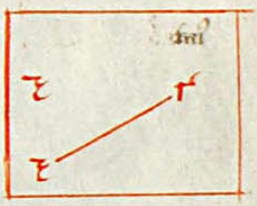
Quot ꝓmus dicit sedo stabunt in tum tuor dros.
habebit dr 1 ꝑ sedē ꝑ ei debitae. Et si tu daret in quartū tuor
dr. habebit dr 17 Quere quot unusq habuit. Pone q ꝓmꝰ hab
dr ꝑ Quare sedē habebit dr 20 ut retrū ꝓte ꝓpōne sat' cedris
10 7 cedris ꝑ quos ꝓmꝰ habet. habeat ꝛpe ꝓmꝰ dr 1 ꝑ ut ꝓpositū est.
Nec addita quarta ꝓte cedris ꝑ ꝓmi hoīs cedris 20 sedi. habebit
sedē dr 21 .s. 1 ꝑ. plusquam debeat. Cr insedi ꝓpōne ꝓte quod ꝓmꝰ
hō sedr. 8 Cr sedē habebit dr 18 cū quibꝫ addita quarta ꝓte cedris
8 ꝓmi hoīs habebit ꝛpe sedē hōdr 20 s 2 plusqꝫ debeat. Jmꝓma
ꝓpōne signum sedi hoī 1 ꝑ insedi 2 ꝗ ꝑ ꝑ dr quos accrescunt ꝓmo.
adꝓinquantur sedē ut crescat 11 crescat. addaꝫ ꝓinquandū 2 Cr insedi
2 ꝑ ꝑ duplet ꝑ 11 erunt dr 1/11 1 quo addito cū dr 8 fiunt dr 1/11 9
aq ꝗbꝫ subtrā 1 ꝑ sūt dr 10/11 ꝑ qui sūt tm ꝑs dr sedi hoīs. qr mt' cōs.
10/11 ꝑ ꝑ 2 reddent 8/11 1 ꝑ dr sedi hoīs.

Inter ꝓregulam ꝓportiōm. Cum dr ꝓmi cū 1/2 dros sedi sūt 1 ꝑ 1/2
dros ꝓmi cū 1/2 de 1/2 dros sedi dr 1 Quare dros 2/3 dros ꝓmi
cū 2/3 de 1/2 dros sedi sūt dr 2 ꝑ dr ꝓmi hoīs cū 2/3 dros cū 1/2 dros
sedi 7 cū 2/3 de 1/2 dros. sedi. sūt dr 17 sicut sunt omīs dr sedi hoīs
cū 1/2 dr ꝓmi. dr aut ꝓmi hoīs cū 2/3 dros sr 17/12 eorum terciū
quoq dros sedi cū 2/3 ut tm sūt ꝑ 17/2 dros ut sedi. ꝑ 17/12 dros ꝓmi
cū 17/12 dros sedi. sūt quātū dr sedi hoīs cū 1/2 dros ꝓmi. Vn
sūt dr sedi hoīs aut 17/12 ut remanebit siquidē 17/12 eorum. ꝑ 17/12
dros ꝓmi sūt 17/12 sedi 7 1/2 dros suos. Vn sūt 17/12 dros ꝓmi
aut 17/12 dros ut. remanebit 17/28 dros ut equales de 17/12 dros
sedi. qr inueniendi sūt duo nūi. quos 17/28 uni sunt 17/12 alteri. qui in
uenimus sic mlt' 28 ꝑ 24 et 12 ꝑ 17 ꝑ quia 28 7 12 duplū
integrali ꝑ 7 mlta cui 1/7 de 28 sat' ꝑ ꝑ 24 et 1/7 de 12 .s. 6 ꝑ 17
erūt 100 et 162 adde quidem sr 100 ꝓpōne qui ꝓmꝰ per sedē sat' 1/2
de 162 q ꝑ 4 ꝑ erūt 147 qui cū erūt de 147 duplet 147 ꝑ 147 et 11 multo
duplo 100 7 162 erunt dros ꝓmi hoīs 11/9 dros sedi 8/11 147 ut ꝑ

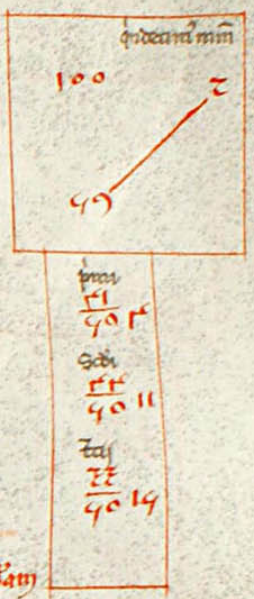
elchatayn inuenimus. Item aliter pone 15 sup $\frac{1}{3}$ et 17 sup $\frac{1}{4}$ et
multa 3 per 4 et extrahe inde simul unum que sunt sup virgulis et cum
homines sint pares secundum quod diximus in regula ephemeris equi remanent quinque
serua et extrahe 1 quod est sup 3 ex ipsis 3 remanent 2 que multiplicata per 15 fiunt
2 8 de quibus tolle 3 que sunt a 15 usque 17 multiplicata per unum quod est sup
3 cum 17 sit plusquam 15 et fiet minus addes remanent 25 que multiplicata
per 4 que sunt sub virgula erit 100 que diuide per 11 exibunt $\frac{1}{11}$ 9 pro dicta prima.
Pro secunda extrahe 1 quod est sup 4 de 4 remanent 3 que multiplicata per
17 et adde 3 multiplicata per 1 quod est 4 propter 3 que sunt a 15 usque in 17 erunt 45
que multiplicata per 3 erunt 162 que diuide per 11 exibunt $\frac{8}{11}$ 14 pro dictis [illegible]
propter pone secundum habere [illegible] Quare primus habet 15 minus tertia rei [illegible] querit secundo [illegible]
secundus petit primo quartam s. dicit $\frac{1}{2}$ 3 minus quarta tertie rei et sic habebit rem
minus $\frac{1}{12}$ et dicit $\frac{1}{2}$ 3 que equantur 17 Quare extrahe $\frac{1}{2}$ 3 de 17 remanent
$\frac{1}{2}$ 13 que equantur $\frac{11}{12}$ unius rei. Quare multa 12 per $\frac{1}{2}$ 13 et diuide per 11 ut re in
tegretur res exibit $\frac{8}{11}$ 14 error habet secundus quorum tertia s. $\frac{10}{11}$ 4 extrahendo de
14 remanent pro dictis primis $\frac{1}{11}$ 9. De tribus hominibus dicitur habentibus

Tres homines habent similiter dictos et primus querit secundo $\frac{1}{3}$ et [illegible] habere dicit
14 secundus petit tertio $\frac{1}{4}$ suorum dictorum et [illegible] habere dictos 17 tertius [illegible] querit primo
$\frac{1}{5}$ suorum dicit et [illegible] habere dicit 19 Queritur quot unus quisque habet [illegible] ut
primus habeat dicit 10 quare secundus habebit 12 et tertius 20 cum quibus [illegible] quinta parte
de dicit 10 primi hominis habebit tertius homo dicit 22 s. 3 plusquam [illegible] Quare in secunda
positione pone ut primus habeat dicit 9 s. 1 [illegible]
tebit ut secundus habeat 15 scilicet [illegible] que est a 9 [illegible]
14 et tertius habebit 8 scilicet quadruplum [illegible] que est a 15 [illegible] 17 cum
quibus 8 addita quinta parte de dicit 9 primi hominis scilicet $\frac{4}{5}$ 1 [illegible] $\frac{4}{5}$ 9 [illegible]
[illegible] 19 quare in hac secunda positione [illegible] tertio homini $\frac{1}{5}$ 9 [illegible] prima
superant ei 3 quare addis [illegible] $\frac{1}{5}$ 9 [illegible] 3 [illegible] $\frac{1}{5}$ 12 [illegible]
[illegible] 1 quod [illegible] in secunda positione primo homini [illegible] $\frac{1}{5}$ 12 [illegible]
[illegible] ex prima [illegible] homini 3 [illegible]
prima positione [illegible] 1 per 3 [illegible] $\frac{1}{5}$ 12 [illegible] $\frac{15}{61}$ [illegible]
de dicit 10 prime positionis [illegible] $\frac{46}{61}$ 9 [illegible] primi quare secundus habebit $\frac{45}{61}$ 12
et tertius $\frac{3}{61}$ 17 et sic possemus [illegible] de [illegible] hominibus [illegible] quisque [illegible] alio
per ordinem. Item primus [illegible] reliquis duobus $\frac{1}{3}$ et [illegible] ha
beat 14 et secundus querat $\frac{1}{4}$ reliquis et habeat 17 et tertius [illegible] reliquis $\frac{1}{5}$
et habeat 19 pone quod primus habet 8 quare reliquis habebunt 18 oportet
diuidere inter utrumque per elchatayn. ita ut secundus cum suis dicit et cum quarta
parte de dictis tertii et primi hominis habeat 17 Quare oportet ut [illegible] prima
positio habeat pro uniuersali et aliam primam particularem positionem pona
mus in qua ponatur quod secundus habet 6 quare ex ipsis 18 remanebunt tertio

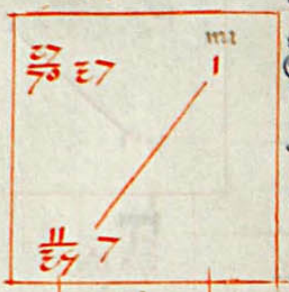


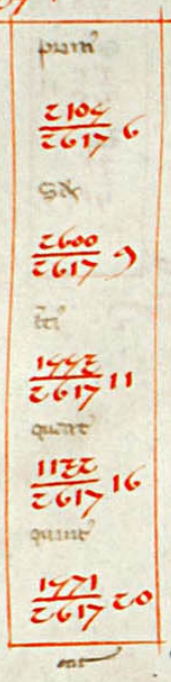


hoī 12 quibz addit cāi 8 pmi hoīs. faciunt 20 quor quarta pte .s. 4
addita sit dr 6 sedi faciunt 11 qui uellent ee 17 qr minuit sedo hoī 6
mhac pma pticulari potione. Vn pone insedi pticulari potione.
quod sedo habeat 10 sat p plusquā impma potitate. qr remanebit
tcio hoī 8 quibz addit cāi 8 pmi. faciunt 16 quor quarta pte sat
p addita cāi 10 sedi faciunt 14 sat z mīn quā relenit. impma cū par
ticulari potione. minuit sedo 6 insedi z ꝙ p que ceum sedo.
adpinquiorē ueritatī z restabit ad adpinquiadū z inuenies ꝙ
p diuides p z scribe p quibz addit cāi 10 erūt 14 tot hī
sedo hoīs. qr remanebit tcio hoī p ee hīc 18 cāi quibz addita quinta
pte de dris 8 pmi hoīs. dr 14 sedi. erūt 7/4 8 q uellent ee 19 ꝙ
impma uniūsali potitate minuit tcio hoī 7/4 10 qr poēt insedi uni
uſali potione. q pmi habeat dr 6 .s. z mīn quā impma uniūsali potitate.
qr oportet ut inter sedo, habeat z p q oportet ut diuidas ipe eos
p electa ym sedo quod supi fecim 18 inuenies quod sedo habebit
7/2 12 scripis z p qr remanebit tcio hoī 1/2 11 cāi quibz adde quin
tā pte de 6 pmi hoīs. dr 7/2 12 sedi. q quinta pars 8 11/14 z erit 1/4 14
q deberet ee 19 ꝙ mhac sedi uniūsali potione minuit tcio hoī 1/4 14 z
q sunt quinte decime 49 et impma minuit et 5/10 que sunt quinte decime
149 ꝙ p z que minuim pmo insedi potitate. adpinquiorem ueri
tati quot sunt decimas 100 restabit ad adpinquiadū 49 quite decime.
ꝙ mhac 49 p z diuides p 100 scribe 9/40 1 que exhede 6 sedo
potionis remanet 21/40 p tot habet pmi hoīs. a quibz usq; indrius p
quos tpe adpinquit se habere habita cura pte reliquor. restat 9/40 9 qr
triplū sat 27/40 27 hīc inter sedo tertiū. quos diuide inter eos pelda
ym sedo quod supi fecim. inuenies quod sedo hoīs habebit 11/40 11 tū 27/40 14
et si sedo in methamorphone adportionis ipius inuenire desiderat pone sedo
tertiū hoiem habere re. et pmi hoīs 14 mīn cura rei. tertia pte uerū
hoīs habet pte rei. et sedo hīc re mīn pte cui sua datur q rta partis z
quarta dr ipius pmi q sedo pte reliqui habebit 17 ꝙ quarta dr
pmi sunt dr 1/2 z mīn 1/12 rei ꝙ rei mīn parte .s. portio sedi cui quarta
partis cui dris 1/2 z diminuta duodecima rei sunt 17 reliquis similes
antur dr 1/2 z remanebit 11/12 rei diminutis 7/8 partis equal dris
1/2 12 Rursus quia tci pte pmo de sedo quinta thīc 19 tripe hīc parte.
ꝙ pars cui quinta dr 14 .s. cui 5/4 z diminuta quinta tcie rei .s. 1/4 et
cui quinta rei mīn quinta pars sit 19 et sit rei quinta rei auferat 1/4 rei
remanebunt 7/4 rei. silr sit 19 auferat 5/4 z remanebit 4/4 16 Rur
sus sit pars auferat 4/4 ei remanebunt 5/4 ꝙ 5/4 partis cui 7/14 rei sit
dr 4/4 16 et 5/6 5/4 partis .s. 7/2 eide cui 5/6 7/14 rei .s. cui 5 rei sit dr



z 1z. s. 4/6 ddris 4/16 Jnuenim enī 11/12 rei mīn 3/4 partis eē sib
z 1z Q.r 11/12 rei minus 3/4 partis eḡtur dualz tercias pcis et 4/5 rei
cō mumis addantur 3/4 partis remanebūt 4/5 rei erūt 29/z rei equales de 17/12
partis. Q.r repiendi sūt duo nūi q̄z 29/z uni simo 41/z hoc ē 17/12 altī
erūt 41 et 29 g̃ ꝓportio rei ad partē ē sīc 41 ad 29 Q.r ḡcēns 29 de
41 remanet ꝓportio drioꝝ sedi addrioꝝ tcii sīc zz ad 29 et quia
11/12 rei minus 3/4 partis sūt dr 1z sede 41. s. ḡportione rei accipiūt
11/12 s. 3/4 16 et auferantur 1/4 mi in 3/4 de 29. s. ḡportione partis rema
nebūt 24 Q.r ē sīc 24 ad 1z hoc ē sicut 40 ad 27 ita zz ad
drios sedi et ita 29 addrioꝝ tcii. Q.r miscabis 27 ꝑ zz et 27 ꝑ 29
et uidet utrūq; miscionē ꝑ 40 et multiplicet sedi habē 11/40 tcii 22/40 14
quoz tcii. s. 9/40 9 ḡcētade 1r remanebūt 31/40 r, ꝓdrioꝝ pmi. Aliter ꝑ regulam
49 dr pmi hois cū 1/z dr secti sūt 1r g 4/14 drioꝝ pmi cū 4/14 tcie
partis drioꝝ secti sūt dr 4 vñ dr pmi cū 1/z drioꝝ secti tcii 4/14 ipi
pmi tcii 4/14 tcie ptis drioꝝ secti. sat cū 4/z drioꝝ secti. sūt dr 19 addi
tis 4/14 drioꝝ pmi sūt dr ipi simul 19/14 q̃mlt addas 4/z drios
secti cū 1/z dedris secti sunt 19/z dr sedi. g 19/14 dr pmi cū 19/z dr
sedi sūt dr 19 sīc sunt dr tcii hois. cū 4 dr pmi. Jte quia dr sedi
hois cū 1/4 dr tcii sunt dr 17 g 2/17 dr secti cū 2/17 quarte partis drioꝝ.
s. cū 2/68 dr tcii sūt dr z vñ dr secti hois cū 2/17 ꝓpoz. s. 19/17 eqde
cū 1/4 et 2/68 simul cū 19/68 dr tcii sūt dr 19 sicut sūt dr tcii hois cū 4
drioꝝ pmi. q̃mlt 19/14 dr pmi cū 19/z dr secti. sunt quātū 19/17 dr sedi cū
19/68 dr tcii sat 19 g sūt 19/17 dr sedi auferē 19/z dr ipi. s. remanebūt
sīlit 23/z ipi. et 2/17 addas g 23/z et habebis 574/714 g 19/14 dr
pmi sūt quātū 574/714 dr secti cū 19/68 dr tcii. q 19/68 dr tcii redigende
sūt ꝙpartes pmi secti. sic quia dr tcii hois cū dr pmi 4/7 dr pmi
sūt 19 sīc sūt 19/14 dr pmi cū 19/z dr sedi. g sūt 19/14 dr pmi aufe
rantur 4/7 dr pmi. remanebūt 4/14 dr pmi cū 19/z dr secti ēqli
drīs tcii hois. Sūt enī 4/14 4/7 dr pmi 81/70 dr ipi. g dr tcii hois sūt
quātū 81/70 dr pmi cū 19/z dr secti. q̃r 19/68 dr tcii sūt 19/68 de 81/70 dr
pmi. sūt adhuc 19/68 de 19/z drīs sedi. vez 19/68 de 81/70 dr pmi sūt 1429/1760
drioꝝ pmo. que ḡcrēt ḡmistionē de 19 in 81 diuisa per 68 ꝑ
70 sc 19/68 de 19/z drioꝝ secti sūt 361/2846 dr sedi g 19/14 dr pmi sūt 574/714
et 361/2846 dr sedi 1429/1760 drioꝝ suoꝝ. q̃r sūt 19/14 dr pmi auferē
1429/1760 dr ipi remanebūt 702/680 dr pmi equales de 574/714 de 361/2846
dr sedi. s. de 2261/2846 q̃r repiendi sūt duo nūi quoz 702/680 uni sūt 2261/2846
alteri. qui repiūt ḡmistionē de 680 in 2261 de 2846 in 702 vt
ꝑ 680 et 2846 diuidūt integraliter ꝑ 1z6 multab 1/1z6 de 680. s.
4 ꝑ 2261 et 1/1z6 de 2846 s. 12 ꝑ 702 q̃ quia 2261 et 702 diuidūt





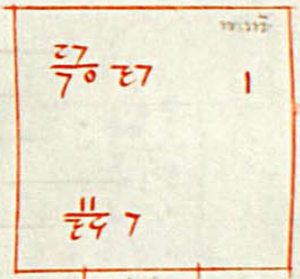
mcepim̃t̃ p̃ 19 mlcaũ 4 p̃ 19 partem̃ te 7261 s. p̃ 119 721
mlcaũ p̃ 19 te 707 s. p̃ 27 ~ habebis 494, p̃mo mio. 777, pdō
hoc ē q̃ p̃porcio dr̃oꝝ p̃mi addr̃os sedi ē sic 494 ad 777 rap̃ p̃mi hō
ptis sedō ½ dr̃oꝝ suoꝝ adde ½ de 777 s. 749 sup̃ 494 erũt 891 q̃d
dleant̃ eē 14 diuide p̃ p̃ 891 p̃ 14 exit 61 minꝰ 61 diuide 494 et 777
inuenies habeb 8/61 9, p̃dr̃ p̃mi et 25/61 12, p̃dr̃ sedi. ut p̃ elchatiym sup̃i in
uenimꝰ dr̃os uō cū hoīs rep̃ies ordine. tñ 9 q̃ñq; hominib;

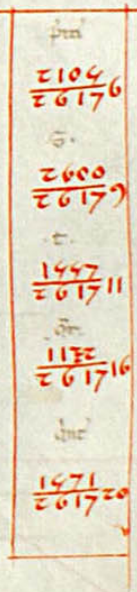
eem hoīes sūt 4 ~ p̃mꝰ hāt 14 habeat ½ 7 deinde sedi ~ cū hoīs. sedi uō
habeat 17 habeat ½ de dr̃ cū quarto hoīs. tertiꝰ quoq; hāt 19 habeat ½
de dr̃ q̃rto q̃nto hoīs. Quarꝰ uō hāt 21 habeat ½ de dr̃os quinto ~ p̃mo
hoīs. Quintus uō hāt 22 cū ½ de dr̃os p̃mi ~ sedi hoīs. Queret̃ quot
dr̃os unūquisq; habeat. pone ut p̃mꝰ hāt dr̃ 8 Residuū uō p̃ abūpt̃
dr̃ 8 usq; in 14 sat 6 oport̃et ut sic cū tedr̃ sedi ~ cū hoīs. Qr̃ me
sedy ~ cū homine hāt dr̃ 18 s. triplū de 6 hūs. Quos dr̃os 18 oport̃
et diuidē p̃portionaliter elchatiym inꝰ sedy et̃ hoiem. ut sedꝰ cū petitē
quū tenet tēo ~ quarto hoī. hāt suos dr̃os 17 et sic cū petitione. quā
tenet quarto ~ quinto hāt suos dr̃os 19 ~ quintus cū sua petitione. quū te
net quito ~ p̃mo hoī. hāt suos dr̃os 21 Vñ patꝫ inp̃ma p̃portiō p̃
tionē q̃ p̃mꝰ habeat p̃portiō 9 exit 18 aquis usq; in 17 relict̃ 8 q̃d
dr̃os cū ~ quarto hoīs. & inter cū ~ quartū hoiem. hāt 22 tequis et
trahe 9 remanent̃ tēo hoī exit dr̃ 18 remanet quarto hoī dr̃ 22
tēo equabꝰ 9 quos hāt cū tedr̃ 19 quos p̃ p̃ habet remanet 10
qui sūt ½ dr̃ quarto ~ quito hoīs. & inter quartū ~ quitū hoiem
hūt 40 equis quart̃ hāt 22 qui remanet quito hoī 27 quos addi
tis cū dr̃os 8 quinti hoīs. simul dr̃ 24 quos sexta pars sit 4 ad
dita cū dr̃ 28 quarto hoīs. simul dr̃ 28 quintelene ē 21 q̃ inhac p̃mꝰ
habet̃ p̃portē sūpsit quarto hoī dr̃ 7 hic pone tertii particu
lā p̃portē. q̃d sedꝰ hāt 10 exp̃dicat̃ dr̃ 18 s. 1 plusq̃ inp̃ma par
ticula p̃portē. aquis 10 usq; in 17 relict̃ 7 q̃ sūt quarto dr̃os cū
~ quinto hoīs. & inter cū ~ quartū hoiem hūt dr̃ 28 ~ aquis et trahe 8
& remanet̃ tēo hoī exit dr̃ 18 remanet quarto hoī dr̃ 20 tertiꝰ com
plet 8 quos hāt cū tedr̃ 19 quos p̃ p̃ habet̃ remanet 11 q̃d ½
dedr̃os quarti ~ quinti hoīs. & inter quartū ~ quitū hoiem hūt 44 equis
quart̃ hāt 20 qui remanet quito hoī 24 quibꝰ addit̃ cū dr̃os 8 p̃mi
hoīs simul p̃ 32 quos sexta p̃s s. 5 7 addita cū dr̃ 20 quarti hoīs.
simul dr̃ 25 7 quintelene ē 21 q̃ inhac sedi particulari p̃portē sūpsit
quarto hoī 6 q̃m sūt sexte 37 sat 10 sexte mutꝰ & inp̃ma particu
lari p̃portē. s. de sexte 47 Qr̃ p 1 q̃d creuit sedo hoī. ad p̃mi quinti
sexte 10 ~ habeo addo p̃mo quinti sexte 37 q̃ mihi 1 p 37 ~ dr̃os

1472

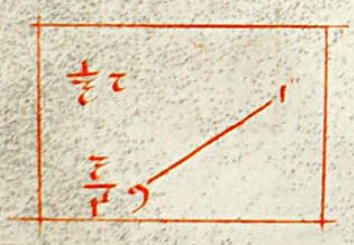
ptio ẽnibꝰ dr̃ 7/10 z quos adde cũ 10 sedi ꝑticulꝰ ꝓnoms. reddꝰ.
ꝑ sedi hois 7/10 12 Reliquos uo quisꝰ usq; in 18 sat 7/10 ꝑ hꝰ sedꝫ qꝫ
inuenit. ẽnibꝰ 7/10 12 sedi hois. ut his 17 remanet 7/10 z quisꝰ ꝑta
dedꝰ tcio 7 quarto hois. g̃ me tcio 7 quarto hoiem hñt dr̃ 4 12 dẽt ẽ
nibꝰ 7/10 ꝑ tcio hois. remanet quarto hoi dr̃ 9/10 8 tcio ẽnibꝰ 7/10 ꝑ qꝫ
hꝰ tcio dr̃ 19 quos ipe ꝓnoms habꝫ. remanet 7/13 ꝑ quisꝰ 1/4 dedꝰ
quarto 7 quinto hois. g̃ me quarto 7 quinto hoiem hñt dr̃ 1/4 7 z ẽquibꝰ
quarto hꝰ 9/10 8 Qꝫ remanet quinto hoi 3/4 6 ꝑ quibꝰ addꝰ cui dr̃ 8 ꝓmi
hois. fiunt 6/107 quos septa pars. 1/10 12 addꝰ cui dr̃ 9/10 8 reddit dr̃ 21
ut oportet. Cui addꝰ 1/7 d dr̃ ꝓmi 7 sedi hois. 1/10 z sunt dr̃ 7/4 64 quin
hois. fiunt 7/1067 quidecies ẽ 22 Qꝫ ẽnibꝰ 22 de dr̃ 7/10 67 remanet
7/10 44 7 tor supmi quinto hoi in hac ꝓma mansiõe ꝓtate. Qꝫ insedit un
ãsali ꝓtate ꝓpe ut ꝓmi hñt 7 Qꝫ me sedi 7 tcii habebit 21 quibꝰ ꝑ
electũm sedi tm ordine dimisꝰ inuenit. quod sedi hꝰ 3/4 10 ẽnipꝫ 21
7 tcio remanet 3/4 10 cũ quibꝰ duabꝰ ꝓcedentibꝰ inuenit ignis sit. ꝑ
quartus hoi hꝰ 1/4 14 7 quinte 4/4 27 sup que si addideris septimã d dimisꝰ 7 ꝓmi
hois. 7 dedꝰ 3/4 17 sedi. quos 1/7 ẽ 18/247 7 erunt 11/24 20 q tenebit ne z qꝫ
in hac sedꝫ mansiõe ꝓtate supme quinto hoi 11/24 7 s. dimitt que ẽ 22 z
usq; in 11/24 20 supmi cui mansiõi ꝓte supmeret ei 7/10 44 ẽ 1
g minimꝰ ꝓmo homini insedit mansiõi ꝓtate adpinquauit quinto hoi
tertium 27/70 27 s. dimitt g ẽ 7/10 44 usq; in 11/24 7 7 tenebit ad adpi
quandoq; ipi dr̃ 11/24 7 oct g 11/24 7 4 1 7 dimitt 4 27/70 27 quibꝰ 412/2617 qꝫ
ẽnibꝰ de dr̃ 7 sedi mansiõi ꝓtate ꝓnoms. remanet 2104/2617 6 ex eo patet
ꝓmi hoi. aquibꝰ usq; in 1 4 tolle 412/2617 7 qui sunt tcii dr̃ sedi 7 tcii hois. q
mt' eos 4 z erit 1472/2617 7 tor hñt me sedi 7 tcii. quos si subduxeris mã
de me eos sedi quod supꝫ fecim 18 inuenit quod sedi hoi hꝰ 2600/2617 9
tcii 1147/2617 11 cui quibꝰ inuenit quod quarto hoi hꝰ 1172/2617 16 7 quinto 1471/2617 20.
te hois sunt 4 ꝓmi ex ꝑte De eodem

sedi 7 tcio 7 quarto tres ẽnibꝰ quibꝰ. 7 quinto sedi hñt 1 4 sedi ꝑte 1/4
tcio 7 quarto 7 quinto hoi. 7 habebit 17 cui quibꝰ ꝑte 1/4 quarto 7 quinto
ꝓmo hoi 7 habebit 19 cui me quibꝰ ꝑte 1/6 quinto ꝓmo 7 sedi hoi.
7 habebit 21 Cui me uo ꝑte 1/7 ꝓmo 7 sedi 7 tcio hoi. 7 habebit 22 Cui
nam quot unusquisq; habeat. ꝑte ut ꝓmi hñt 8 qui me sedi 7 tcii 7
quarti. habebit 18 s. explũ dimitt que ẽ 8 usq; in 14 que 18 aptꝫ
ter diuidꝰ p electũm me ẽ cui ꝑte ad libitũ me sedi hñt 6 ꝑte
18 qui remanet tcio 7 quarto 12 aptꝫ ter electũm me numera
me utrũq; 7 quia ꝓcedentes ꝓmi 7 sedi hois. sibi sunt. 7 aptꝫ ter alii
falsi ꝓtione tcio hoi ꝓte. Ido ꝓtione ꝓmi hoi ꝓmi ꝓmi electũm
appellant. ꝓtione uo sedi. ꝓmi sedi electũm nolũt. te ni ꝓmi



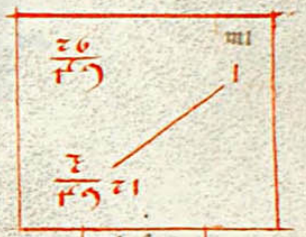


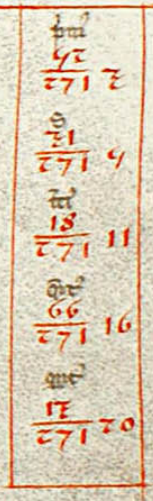
ꝓtione sedi echatiym. ꝓsium ue sedē hāt 6 oportet ue me
dium ⁊ quartū ⁊ quintū hoiem hāre 4 4 .s. quadruplum dissē q
ē ab ipis 6 usq in 17 exq⁹ 4 4 cū tcio ⁊ quarto hāre 17 & q⁹ hē
22 tenū oportet ue ꝓcium echatiym diuidis 12 tm. me dium ⁊ quārū
hoiem. tcio ue tcio cū ꝓtione. qua ꝓtio quarto ⁊ quīto ⁊ ꝑmo hoi ⁊ posse
sium hales ꝓtio .s. 19 que diuisio duplicē fit. ꝑmū quidē ue ꝓtio 12
q hāt me dium ⁊ quartū. ꝓtis ue tcio hō habeto alioq quātitate co
solabilē ipm̄ p echatiym. sedm̄ q ipi mutationes dmōstratū ē. Vt alie adde
4 4 q hāt me dium ⁊ quartū ⁊ quintū hoiem. cū 8 ꝑmi hoīs erūt 42
exq⁹ oportet tot dare tcio hoi. ut cū hoīe quīto residuū. hāt 19
tcio. q ꝑ ꝓtione hac ꝑma ꝓtio tcii echatiym. ut tcio hō hāt 7 exceptis 42
& remanet 40 quīto ⁊ quīto ꝑmo hoi. quox quīta ꝓtio .s. 10 addita
cū 7 tcii hoīs. faciūt 17 que debēt ee 19 q̄ minuit tcio hoi 7 ut
ꝓtio mutādi ꝓtione tcii echatiym. ut tcio hāt 7 ex his 42 & remanēt
reliqui tcij 34 quox quīta ꝓtio .s. 9 addita cū 7 tcio. faciūt 16 q̄s
ee 19 & hac sedi ꝓtio minuit tcio 3 ꝑma minuenda ei 7 & ꝓ
4 q̄ erūt ee tcio. q̄ppinquiore ꝓ ueritati 4 tm̄ adq̄ppinq̄
3 ei mutab 3 ꝓ 4 diuidēs ꝓ ex his 3 quibz addita cū 7 sedi
ꝓtionis. faciūt 4 10 tot hēt tcii hō ul aliq̄ tcii hō 19 habita quīta
ꝓtione tertiox quarti ⁊ quīti ⁊ ꝑmi hoīs ⁊ ipi quatuor hāre minima 42 .s.
ausferēs 19 re 42 remanēt 23 quīto ⁊ quīto ꝑmo hoi. ꝑ ratione
quīte dē ipox quā tenet tcio hoi & illa q̄nq̄ta pars tocius residui
ipox .s. de 23 q̄ta ꝑ te 23 que 4 8 ē illud q tenet ipi tcio hoi.
quibz 4 8 addita cū 23 reddūt 4 41 ꝑ tertii quarti ⁊ quīti ⁊ ꝑmi
hoīs quibz exceptis de 42 sup dicta remanēt 5 10 tcio hoi. ut per
echatey inuentū ē. Residuū uō q̄ē usq in 12 .s. 1 hēt quartus.
cū me utriusq hāre 12 si que 1 adde 5 7 .s. q̄rta ꝓtis de 23 quīta
hoīs ⁊ de 8 ꝑmi ⁊ de 6 secti. faciūt 11 8 qui tenet ee 21 & ipma
ꝓtio secti echatiym minuit quīto hoi 1 12 q̄s ponet in sedi pti
one cūe sedi echatiym. ut sedis hō hāt 4 exceptis 18 q ipi hāt cū
tcio ⁊ quīto hoīe ⁊ sic remanebit tcio ⁊ quīto 13 quos oportet ut
hāre cū quīto hoīe 4 8 .s. quadruplū dictē q ē a 4 usq in 17 &
quīcuq hēt 24 dm̄ diuidet 12 tcii ⁊ quarti hoīs me cos. tcio ut tcii cū sua
ꝓtione hāt 19 quā diuisionē faciāt ꝑ duas alias ꝓtiones .s. ꝑ quartū
echatiym. ut ꝑ ualuū thum modū qui ē pulcer. et inuenies exceptis 12 q
tcius hēt 5 9 ⁊ quarte 1 3 si q 1 3 adde 8 .s. secti de 24 quīti
hoīs. ⁊ de 8 ꝑmi. ⁊ de 4 secti erūt 1 11 qui tenetur ee 21 q̄s ipsa
ꝓtio tcii sedi echatiym minuit quarto hoi 5 9 ꝑma cū minu
enda sit a 12 12 & ꝑ 1 q minuūt sedi. adq̄ppinquiore quarte ueritati

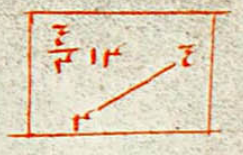


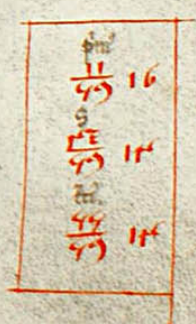
$\frac{1}{2}$ 2 .s. differentia que ē a $\frac{1}{12}$ 12 usq in $\frac{1}{4}$ 9 .rectam adppin qui
dē ipi $\frac{2}{4}$ 9 qr mlt 1 p $\frac{2}{4}$ 9 .diuidet p $\frac{1}{2}$ 2 ꝙ erbuē $\frac{4}{28}$ 4 que
exthe de 4 sede ꝓtionis. remanēt $\frac{22}{28}$ .tot hē sedꝫ. cui ꝑmꝰ hat
3 dīn studeat inuenire ꝓquintū electatym ul' ꝓbitū tuīm
modū. quātumcūq tcīū .quarti .quīti hoīs. .inuenies q tcīi hē $\frac{1}{4}$ 4
.quāt $\frac{17}{28}$ 11 .quītus $\frac{17}{28}$ 17 sic qual adde $\frac{1}{7}$ dor 3 ꝑmi .de $\frac{22}{28}$
sedi. .de $\frac{1}{7}$ 4 tcīi quoꝝ septima ē $\frac{11}{196}$ 2 erūt $\frac{29}{49}$ 49 quotcūq erūt
22 & impma ꝓie ꝑmi elcha. supant quīto hoī $\frac{29}{49}$ 26 qr pone
insedi ꝓtē ꝑmi elchatym uc ꝑmꝰ hat 7 .s. uno minus quia in
ꝑma .elic oportebit uc inc sedꝫ .tcīū .quātū hoīem habūt 21 que
studeat diuidē ꝓelchatym. .tci unus quisq cū sua ꝑsone hat suū ꝓtiū
nūm .s. quod sedꝫ hat 17 .tcī hat 19 .quart 21 .inuenies q sedꝫ expis
21 hē $\frac{4}{7}$ 1 tcī $\frac{4}{7}$ 6 quart $\frac{4}{7}$ 17 ꝙ equaꝫ inuentione .inuenies quod qđ
hē $\frac{6}{7}$ 41 cū quīq $\frac{6}{7}$ 41 adde septimū te 7 ꝑmū .de $\frac{4}{7}$ 1 sedi. .de $\frac{4}{7}$ 6 tcīj
q ē $\frac{10}{49}$ 2 erūt $\frac{29}{49}$ 44 q delet ē 22 qr nō hic sedi ꝓtē ꝑmi elch. sup
ant quīto hoī $\frac{29}{49}$ 21 .ī ꝑma supauerit ei $\frac{29}{49}$ 26 vn p 1 q minimū
ꝑmo hoī. qđpin quauis ꝓē $\frac{26}{49}$ 4 scīlz differt que ē $\frac{29}{49}$ 26 usq in $\frac{2}{49}$ 21
.rectā ad qđpin quādū ipi $\frac{2}{4}$ 21 qr mlt 1 p $\frac{2}{49}$ 21 .diuidet p $\frac{26}{49}$ 4
erbuīt $\frac{219}{271}$ 7 quas exhendē 7 sedꝫ ꝓtionis remanēt $\frac{47}{271}$ 2 .tot ue
nire hē ꝑmꝰ. quib inuentis. studeat dē reliquoꝝ p elchatym in sedꝫ
ssm modū inuenire. .inuenies quod sedꝫ habet $\frac{11}{271}$ 4 tcī $\frac{18}{271}$ 11 q tuc
$\frac{66}{271}$ 16 qđ $\frac{62}{271}$ 20 .sic studeat opari in similib q thoīb. .s. oīes p
elchatym mirabilit̄ soluūtur. de tribus hominib. q hebebāt dē

THēs hoīes habebāt dē .rpīm ꝓtē sedꝫ 7 .ꝙdē se hīe. cer tcīū q ipe
sedꝫ nō ꝓtē tcīi hoī 9 .habebit quat tcīū quā ipe. .cert ꝓtē primo
hoī 11 .habebit quīquel tcīū quā ipe. .pone quīte ut ꝑmꝰ hat 17
cū quīq adde 7 que ꝓtē sedꝫ erūt 24 quoꝝ tcia ꝑs .s. e 8 & re
sidui quod remanet sedꝫ hoī. cū tedit ꝑmo 7 & ipe hē 14 cū quīq
adde 9 que ꝓtē tcio hoī. erūt 24 quoꝝ ꝑs .s. 6 & residui quod
remanet tcio. datur 9 sedꝫ hoī. qr ipe habet simil 14 cū quīq adde
11 q ꝓtē ꝑmo. erūt 26 & ꝑmo remanēt 6 q 26 delent ē 20 sat
quīquies te 6 q remanēt ꝑmo. & in hic ꝑma ꝓtē minuit tcio hoī
4 q sic a 26 usq ad 20 qr ꝓtē insedi ꝓtē ut ꝑmꝰ hat 14 si 2
min quia impma Qr sedꝫ hē 14 .tcī $\frac{2}{4}$ 14 cū quīq adde 11 q ꝓtē ꝑmo.
remanebit ꝑmo 2 .tcī habebit $\frac{2}{4}$ 24 que $\frac{2}{4}$ 24 delent ē 14 .s. quī
quies te 2 & remanēt ꝑmo. & insedi ꝓtē supant tcio hoī $\frac{2}{4}$ 10
impma eī minuerūt ei 4 Qr adde $\frac{2}{4}$ 10 cū 4 erūt $\frac{2}{4}$ 14 & p 2 q
minuit ꝓuenet $\frac{2}{4}$ 14 quod & minuend ut ꝓuenit 4 mlt & 4
p 2 .diuidet p $\frac{2}{4}$ 14 erbuīt $\frac{28}{49}$ exthe de 17 ꝑme ꝓtionis. remanebit









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$\frac{1}{4}$ residui tertii cum residuo primi et dat 18. Ostensum est auferre quod residuum primi dat 18 fuit triplum tertio residuo sedi quare $\frac{1}{4}$ residui sedi dat 26 fuit $\frac{1}{4}$ residui et triplum .s. $\frac{12}{4}$ residui sui quare sine ulla portione auferre $\frac{1}{4}$ residui sedi remanebit $\frac{1}{4}$ residui tertii cui $\frac{11}{4}$ residui sedi dat 26. Adhuc quare $\frac{1}{4}$ residui tertii dat 10 et quinta $\frac{2}{5}$ residui primi cui residuo sedi si simpliciter addite portioni addite dat 16 et $\frac{1}{4}$ residui tertii. cui dat 10 et cui 16 .s. cui 26 et $\frac{2}{5}$ residuo primi et residuo sedi et cui dat 16. Et eius residui sedi cui dat 16 et dupli tertio residuo tertii quare $\frac{1}{4}$ residui tertii dat 26 fuit $\frac{2}{5}$ residui primi et quadruplum .s. $\frac{20}{4}$ residui sui. Quare si eadem portione auferre $\frac{1}{4}$ residui tertii remanebit $\frac{2}{5}$ residui primi cui $\frac{19}{4}$ residui tertii et dat 26 et quinta $\frac{1}{5}$ residui primi cui $\frac{3}{5}$ residui sedi fuit dat 20 et $\frac{11}{4}$ residui sedi cui $\frac{1}{4}$ residui tertii fuit dat 26 et $\frac{19}{4}$ residui tertii cui $\frac{2}{5}$ residui primi fuit simile dat 26 oportet ita esse equales portiones monitas ut redigantur partes primi et sedi tertii ut sint 26 sicut fuit alias quod fuerit sic per inquisitionem 20 et credit 26 quod per 20 et habet $\frac{2}{14}$ et quinta $\frac{1}{5}$ residui primi cui $\frac{2}{5}$ residui sedi sic dat 20 ergo $\frac{2}{14}$ de $\frac{1}{5}$ residui primi .s. $\frac{2}{28}$ et $\frac{2}{14}$ de $\frac{2}{5}$ residui sedi .s. 10 et $\frac{2}{14}$ de dat 20 .s. de dat 4 quare fuit $\frac{1}{5}$ residui primi auferre $\frac{2}{44}$ residui ipsi et de $\frac{2}{5}$ residui sedi auferre $\frac{1}{10}$ residui ipsi $\frac{12}{44}$ residui primi cui $\frac{12}{20}$ residui sedi remanebit dat 26 et $\frac{182}{44}$ residui primi cui $\frac{12}{20}$ residui sedi fuit quinta residui sedi $\frac{11}{4}$ residui sedi cui $\frac{1}{4}$ residui tertii. Quare sicut $\frac{11}{4}$ residui sedi auferre $\frac{12}{20}$ residui ipsi remanebit $\frac{182}{44}$ residui primi quinta $\frac{21}{10}$ residui sedi cui $\frac{1}{4}$ residui tertii et $\frac{11}{4}$ residui sedi cui remanebit $\frac{12}{20}$ sic et $\frac{11}{4}$ fuit ingressimi .s. fuit $\frac{44}{20}$ equalis et tertii $\frac{12}{20}$ remanet $\frac{42}{20}$ .s. $\frac{21}{10}$ sequa $\frac{11}{4}$ residui sedi cui $\frac{1}{4}$ residui tertii fuit quinta $\frac{19}{4}$ residui tertii cui $\frac{2}{5}$ residui sedi .s. 26 sicut $\frac{19}{4}$ residui tertii auferre $\frac{1}{4}$ residui ipsi $\frac{11}{4}$ residui sedi quinta tripli residui tertii cui $\frac{2}{5}$ residui primi qua minore minuendi et de $\frac{21}{10}$ residui sedi que prius sint tertio residuo tertii et primi. Sicut enim ut dicimus $\frac{11}{4}$ residui sedi quinta tripli residui tertii cui $\frac{2}{5}$ residui primi. Et $\frac{21}{10}$ residui sedi .s. $\frac{42}{20}$ cui sint $\frac{42}{44}$ de $\frac{11}{4}$ residui sedi .s. et $\frac{44}{20}$ et $\frac{42}{44}$ tertio residui tertii. et de $\frac{2}{5}$ residui ipsi et quinta $\frac{182}{44}$ residui primi fuit quinta $\frac{21}{10}$ residui sedi cui $\frac{1}{4}$ residui tertii et sibi $\frac{182}{44}$ residui primi quinta $\frac{126}{44}$ residui tertii cui et cui $\frac{28}{44}$ residui sui et cui $\frac{1}{4}$ residui tertii. Et $\frac{126}{44}$ et $\frac{1}{4}$ residui tertii fuit $\frac{21}{11}$ residui tertii cui $\frac{28}{44}$ residui sui. Quare sicut $\frac{182}{44}$ auferre $\frac{28}{44}$ remanebit $\frac{240}{99}$ residui primi quinta $\frac{21}{11}$ residui tertii. Quare reperiendi sunt duo numeri quorum $\frac{240}{99}$ uni sint $\frac{21}{11}$ alteri. quos inveniemus sic quia 99 et 11 sunt simul duplum integrale 11 et $\frac{1}{11}$ de 99 .s. 9 et $\frac{1}{11}$ de 11 .s. 1 et $\frac{240}{99}$ et habebis primo numero 206 .s. primo residui tertii hoc $\frac{240}{99}$ et quinta residui tertii cui dat 20 et quadruplum tertio residuo primi et $\frac{206}{44}$ et $\frac{147}{44}$ et quibus ejicias $\frac{240}{99}$ remanet $\frac{1118}{99}$ quos dividendo

$\frac{42}{44}$ d triplo redu tertii sc $\frac{126}{44}$ et $\frac{42}{44}$ d $\frac{2}{5}$ residui primi. sc $\frac{28}{44}$ residui

ptem 20 hoc erunt 49 in quo 49 diuide 20 hoc est 2 40 erunt pre
sidno pmo hois dr 11/49 4 cui quilz adde dr 11 qs pm dat tcio er
11/49 16 et tue habet, presidno tcii 44/49 4 cui quilz adde dr 9 quos ipe
dat sedo et 44/49 11 tot hr tci et qm pm cui dr 7 sedi hr 2 tm q. sedes adde
7 sup 11/49 16 et 11/49 27 sup tcium pte quox. s. qi sr 17/49 7 sic addendo
ipi 7 habeb 17/49 11, pdr sedi Eadem em qo & terrilz omnibz qui
bursas dr. reppiere. In pma quax emit dr 18 in secda dr 16 in tcia dr
20 et pm cui pma bursa hnt ter tot qua sedes. Sedes cui secda qr
tm qua tci. terci cui tcia quages tm qua pm. Primi hr ut pdixim 11/49 4
sedes 17/49 7 terci. Iuter, pmci. qm ostensu & supi quod 1/2 residui pmi
cui dr 6 & quarti residui sedi. Quarta pars tcie pcis residui pmi. s.
1/2 residui pmi cui 1/4 te dr 6 s. cui 1/2 1 & quarti quarta pars residui
sedi. Vnusquisque portionis addatur dr 4 erit 1/2 residui pmi
cui dr 1/2 4 quinti 1/4 residui secdi cui dr 4 vere 1/4 residui sedi cui dr 4 ostes
sa & equalem ee residuo tcii hois. Qr 1/2 residui pmi cui dr 1/2 4
& quarti residui ipos tcii. Qr 1/4 te 1/2 s. 60 residui pmi cui
1/4 te dr 1/2 4 s. cui 1/10 1 & quarti 1/4 residui tcii. qr si addantur utq
portioni dr 4 erit 60 residui pmi cui dr 1/10 4 quarti 1/4 residui tcii
cui dr 4 vere 1/4 residui tcii cui dr 4 & quarti residui pmi hois. Qr
60 residui pmi cui dr 1/10 4 & quarti residui eiusde pmi. Qr si coiter
auferatur 60 residui pmi remanebt 49/60 residui pmi quarti dr 1/10 4
Qr inuenies nim cui 49/60 sunt 1/10 4 ambos 60 p 1/10 4 duodecy 49
erunt 11/49 4 presidno pmi hois. Et nota cui tres hoies inuenit 60
bursas in pma que fuit 18 in secda 16 et in tcia 20 et pm cui pmo
hab triplu sedi. sedes cui sedi quadruplu tcii. tcii cui tcia. quintuplu
pmi. et pmi residui quarta dri pmi. sedi secdi. tcii tcii hois.
Cui manetie ei solutione in quarta pte duodecimi capti, pos regis
demostratis inuenies. De tribz hominib;

Res hoies equi emere uolentes cui nulli pse ipm emere possit
pmi petit sedi 1/2 tcio 1/2 suox bis supponit ipm equm emere. sedes
petit tcio 1/4 pmo 1/4 terci naq petit pmo 6 sedo 1/4 pone quod
q pm hab 20 in quibz repit 1/4 qua petit sibi sedes et 6 qua pe
tit sibi tci q pcipit firmi semp habet necesse e. deinde pone impmis
pcipe quod sedes hab 70 cui in pcis repiat 1/2 quod petit ei pmi 1/4
petit ei tci. demi cuilibet qui pmi. sedes petit tcio. Ita pmi pte ei 1/2
sedes 1/4 & pmi petit ei 1/2 plus q sedi. s. habundantiam que ea 1/2
ulgz in 1/4 quo intellecto adde petitione sup 20 q. pte pmi sedo. s. 1/2
de 70 & adde sup 70 petitione q. sedes petit pmo. s. 1/4 ei 76 sunt 11
mag q 64 q 11 s 1/2 duoz tci hois ergo tci ho hat duodecies 11 s.

ꝛꝛ er sic ꝑmꝰ er sedꝫ ꝓtlit equū emē hoc ē cū eoꝝ ꝓtionibꝫ hn
tebit unū et eundē nūm. Vbiꝫ ꝙ ꝑmꝰ qui hē 70 cū ½ te 70
sedi cū ½ te 122 tēi hē 109 sedꝫ uō qui hē 70 cū ¼ te 122 tēi cū ¼
te 70 ꝑmi hē simlr 109 que ponāt eē ꝑtium equi. dein adde
sup 122 tēi ¼ te biz 70 ꝑmi et ¼ te biz 70 sedi et ¼ 7. ſ. 28 ꝙ
ꝓtio equi ꝙ in hac ꝑma ꝓtiē sup̄ant tēio hoi 28 qr̄ ꝓcē in sedi ꝓtē
ut sedē hāt 46. ſ. 14 mīn quia in ꝑma inuenitur ſm rationē quod
tēi habebut 28 et ꝑtiū equi ē 74 et minuit ei 12 in sedā ꝓtiē ꝙ
ꝙ 14 que mīn tēio hoi minuit eidē 28 que sup̄ant ei in ꝑma
ꝓtiē et 12 que minuit ei in sedā ꝓtiē hoc ē 41 qr̄ mlt 14 ꝙ
28 et duntex ꝙ 41 et exinde illud quod excit de 70 ꝑme ꝓtiōis
ut int 14 ꝙ 12 duntex ꝙ 41 et quod excit addet sup 46 sedē ꝓ
tiōis quod ē ꝓtēi et 29/41 49 et tot hē sedꝫ ꝙ in inuentionē iue
nitur ſm rationē qr̄. hē 21/41 69 et ꝑtiū equi ē 127/41 82 quos mios si
in integrū hēe uolueris mlt unūq; eoꝝ ꝙ 41 ſ. hē ꝑmꝰ 1470 sedē 2028
tertiꝰ 2490 eq; 7229 Aliter ꝙ regl̄am ꝓportionum

Quiam ꝑmꝰ cū ½ biz̄ꝝ sedi ſ. cū ½ biz̄ꝝ tēi hē qr̄ū sedꝫ cū ¼ biz̄ tēi et
cū ¼ biz̄ ꝑmꝰ. ſ. ꝑtiū equi si exinde ꝙ auferat ½ biz̄ sedi remanebit
ꝑmꝰ cū ½ biz̄ ē equal dimidio biz̄ sedi cū ¼ biz̄. ſ. et cū ¼ biz̄ ꝑmi
ſē si abutrūq; ꝓte auferat ¼ biz̄ ꝑmi remanebit ¼ biz̄ ꝑmi. cū ½ biz̄
tēi quartū ½ biz̄ sedi cū ¼ biz̄ tēi. Vnde si abutrūq; ꝓte auferat ¼ biz̄ tēi
remanebit ¼ biz̄ ꝑmi cū ½ biz̄ tēi quarti ½ biz̄ sedi. Rursum quia
tēi cū ⅙ biz̄ ꝑmi et cū ⅐ biz̄ sedi habetur qr̄ū ꝑmi cū ½ biz̄ sedi
cū ½ biz̄ tēi. ſ. cōie auferat ½ biz̄ tēi remanebit ½ biz̄ tēi hoīs. cū ⅙
biz̄ ꝑmi. et cū ⅐ biz̄ sedi equales debēt ꝑmi cū ½ biz̄ sedi. Vnde si
cōie auferat ⅙ biz̄ ꝑmi. et ⅐ biz̄ sedi remanebit ½ biz̄ tēi qr̄ū ⅚ biz̄
ꝑmi cū ⅚ biz̄ sedi. Iam ꝓcēdi ⅐ de ½ remanet ⅚ et qm ½ biz̄
tēi sūt ⅚ biz̄ ꝑmi. ⅚ et biz̄ sedi. ꝙ ⅛ de ½. ſ. 1/12 biz̄ tēi cū ⅛ de ⅚
biz̄ ꝑmi. ſ. ⅚ et ⅛ de ⅚ biz̄ sedi. ſ. 5/112 Ulterius ē cū ¼ biz̄
ꝑmi cū 1/12 biz̄ tēi sūt qr̄ū ½ biz̄ sedi. ſ. 1/12 biz̄ tēi et ⅚ biz̄ ꝑmi
et 5/112 biz̄ sedi. Qr̄ ¼ et ⅚ biz̄ ꝑmi. ſ. 217/280 cū 5/112 biz̄ sedi si
qr̄ū ½ biz̄ sedi. Qr̄ ꝓcēdi 5/112 biz̄ sedi de ½ biz̄ ꝙ remanebit 217/280 biz̄
ꝑmi qr̄ū 41/112 biz̄ sedi. Qr̄ ꝙ biz̄ ꝑmi ꝙ sedi reperiendi sūt duo nūi qr̄
217/280 uni sunt 5/112 biz̄ ꝙ quoꝝ multiplex sic quod 280 et 112 qr̄ sūt sub
multiplices duidūt integraliter ꝙ 8 mlt 8 de 280. ſ. 20 ꝙ 41 et 8
de 112. ſ. 14 ꝙ 217 habebit 1470 et 2028 Rursū quia demōstrū
tū ē ꝙ ½ biz̄ sedi ē 5/14 biz̄ ꝑmi et 1/12 biz̄ tēi ꝙ 5/14 biz̄ sedi cū sit
5/7 medietas biz̄ sedi et 5/7 de 5/14 biz̄ ꝑmi et 5/7 de 1/12 biz̄ tēi hēbit ꝑmꝰ
et 5/8 biz̄ tēi ſ. et ½ biz̄ tēi. 5/6 biz̄ ꝑmi et 5/14 biz̄ sedi ſ. 5/14 biz̄

sedi cū sint ½ ½ p̄mi er 8¼ tēr tēi er ¼ tēr tēi. ¼ ½ ⅛ p̄mi. s. 49 ½ ¼
er 8¼ tēr sinor. Q. sint ¼ bizōr tēi auferē 8¼ tēr ip̄i remanebūt 49 ½ ¼
p̄mi 17 ½ ⅛ hōr tēi qr̄ pbīt p̄mi tēi reperiendi sūt duo mīi quor 19 ½ ¼ unū
sunt alii 17 ½ ⅛ alīd. Q. mīb 1¼ de 42 .s. 2 p 17 er 1¼ de 28 .s. 2 p 49 2
hūrbis p̄mo mīo 41 er p̄mīo tēi hoīs 118 2 tm sūpl̄ p̄mīo p̄mi hoīs
mūenim 1430 ere sic 41 ad 118 tm 1430 silr p̄mi ad bizor tēi. Q.
ne hābiciōr tēi mīb 118 p 1430 2 dūdet p 41 .s. 41 de 1430 .s. 2 mīl
118 2 hatet, pbīt tēi hoīs 2428 vt si bīt sedi hoīs. s. 2028 mīs redigē in
portiōnē mūenim qua p̄mi hūr adūtū .s. cū p̄mi hūr 41 2 tēi hūr 118 mīl 41
p 2028 er dūde p 1430 hoc ē 2028 dūdet p 41 de 1430 .s. p 2 qm
bīt, pbīt sedi hoīs 41 101 qāt nō sūt mūtegra hatebūtur 1430, pbīt p̄mi
hoīs er 2028 pbīt sedi er 2428, pbīt tēi cūi ut mūenias p̄tūt equi sūpbīt
p̄mi hoīs .s. sūp 1430 ade ½ de bīt sedi .s. 1419 er ½ de bīt tēi .s. 1180 er
hatebūt, p̄tio equi bīt p 2229 ut p̄dcham̄ mūenim. Mūenies quidē
bīt 1430 p̄mi hoīs 2028 sedi possūt bīt tēi alīt reppīre .s. cū ¼ bizōr
p̄mi 2 cū 1½ bīt tēi sūt ½ bizōr sedi sūt ½ tōt. sedi .s. de 1419 auferūt ¼
bizōr p̄mi .s. 1224 remanēt 294, p 1½ tōt tēi qr̄ mīlt 294 p 1½
redūt p 2440 ut pbīt tēi mūenīt ē. Sūt p hoc quod dictū ē de
el chatayn 2 de regīs augūm ordinatiōnis arg, p̄positi materiam sol
uendi omēs q̄stiones habēri potest. Vn̄ positis quattūr q̄stiōb⁹ solutis ordo
cepīt ponē dispositum. De quatuor hominib; 2 una burſa
Sūt hoīes sūnt er p̄mi p̄tat sedo ½ tcio ½ 2 quarto ¼ 2 posūt equi
emē sedē p̄tat tcio ¼ 2 quarto ⅛ 2 p̄mo 1/16 tēi mīl quarto 1/16 p̄mo 1/32
sedo 1/64 Quart̄ qr̄ p̄tat p̄mo 1/64 sedo 1/128 tcio 1/256 p̄mi bīt 8 4698 48
sedo 2174 1226 tertii 26 9446 060 Quart 29 6474 160 ecō 24 8299 901
Equitū hoīb⁹ equi emē volentib⁹ p̄mi 2 sedo p̄tat tcio 2 quarto ½ lōgū
ē, p̄ponit ipm emē. Sedo nō tēi p̄tat quarto 2 quito ¼ tertii
qr̄ 2 quartus p̄tat quito er p̄mo ⅛ Quart̄ unīq 2 quīt̄ p̄tat p̄mo er
sedo. 1/16 Quint̄ aūt 2 p̄mi p̄tat sedo 2 tcio ⅛ p̄mi bīt 980 sedo 840 tertii
quartus 946 quīt 1260 p̄tat equi ē bīt 7471.
Quinque hoīes dr̄ habentes mūenī burſam dr̄ equitū p̄mi cū bur
ſi hī duplū sedi er tēi. sedo triplū tēi er quarti. tertii quadruplū quarti.
er quinti quarti quīcuplū quīti 2 p̄mi Quintus sextuplū p̄mi sedi
p̄mi hī 1 sedo 461 tēi 821 Quarti 287 Quīti 609 burſi 2761
Et hoīes sūt quattūr 2 p̄mi cū burſi De quatuor hōib; et una burſa.
habentē duplū sedi 2 tēi. sedo triplū tēi er quarti. tertii quadruplū quarti
2 p̄mi. Quartus aūt cū burſi hī quīcuplū p̄mi 2 sedi. Q. questio insolubilē
nī cōcedatur p̄mū hoīem habere tot. 2 sic ūmoritur nūl sedo hī 1
tēi 1 quarti 1 burſi 11 debitū p̄mi hoīs ē 1 er sic p̄mi cū burſi hī 10 sat'

duplum sedi et tcii · sedz quoq; cū bursa hē 14 scil' triplū tcii · quarti et tcii cū bursa hē quadruplū quarti et pmi. quia sūt · que hē quarte auferatur tertiū pmi. remanebūt $\frac{2}{3}$ · tcii dicūt hyre · me quartū · pmi hyre hoiem. Quartus aūt cū bursa hē 14 que sūt quadruplū pmi · sedi ut oportet.

Et sūt cognoscē hāc quēstionē sine tertio pmi hois insolubilem ee hoc scire poteris p mutuā ratione, proportionū ipōz quē sūt admutē me se. Nam qua pmus cū bursa hē duplū sedi et tcii medietas pmi et bursa · et quātitas sedi · tcii. Simlr habebit et duodecē tiōz. quod tcii sedi · bursa · et quātitas tcii et quarti. Adhuc · quarta tcii · et bursa · et quātitas quarti · pmi. nec nō et quīta quarti · bursa · et quātitas pmi · sedi. Et qm medietas pmi · bursa · et quātitas sedi · tcii. Sicōmunit adūgat quātitas quarti · pmi erit quātitas triōz quatuor hoīm equalis te $\frac{1}{2}$ triōz pmi et de $\frac{1}{2}$ bursa et quarti hois. Rursus pma $\frac{1}{2}$ sedi · bursa · et quātitas tcii · quarti. Sicōmunit adūgat tri sedi et pmi erit trillōz quatuor equales te $\frac{1}{2}$ triōz sedi · de $\frac{1}{2}$ bursa · et de tris pmi. Nam trii illōz quatuor inuenta sūt ee $\frac{1}{2}$ pmi et $\frac{1}{2}$ bursa · et quātū trii quarti hois. Ergo bursa et $\frac{1}{2}$ pmi cū triis quarti sūt quātū $\frac{1}{2}$ sedi et $\frac{1}{2}$ bursa et $\frac{1}{2}$ pmi. Sicōmunit auferat $\frac{1}{2}$ bursa et $\frac{1}{2}$ pmi scil' tri ei remanebūt $\frac{1}{2}$ triōz sedi equales te $\frac{1}{2}$ bursa et de $\frac{1}{2}$ pmi et de tribus quarti. Cū $\frac{1}{12}$ te $\frac{1}{12}$ triōz sedi · s. tri ipi' sunt $\frac{1}{12}$ de $\frac{1}{2}$ scil $\frac{1}{8}$ bursa et $\frac{1}{12}$ te $\frac{1}{2}$ scil $\frac{1}{8}$ pmi et $\frac{1}{12}$ triōz quarti sūt hoīes. tertii · ut inueniat proportiō triōz tcii addatur bursa et pmi et quarti hois. Ac $\frac{1}{12}$ triōz tcii hois et bursa · quoquis tris quarti · pmi et addē utriq; parti triōz sedi et tcii et erit omes tri quatuor hoīm equales te $\frac{4}{12}$ triōz tcii · de $\frac{1}{12}$ bursa et de tribus sedi hois Sed tri sedi hois sūt $\frac{1}{8}$ bursa et $\frac{1}{8}$ pmi et $\frac{1}{12}$ triōz quarti. Ergo $\frac{4}{12}$ triōz tcii cū $\frac{1}{8}$ bursa et cū $\frac{1}{8}$ pmi et cū $\frac{1}{12}$ triōz quarti sūt sūt quātū sūma tri hoiquatuor hoīm. Quā sūma inuenim ee · qtū $\frac{1}{2}$ triōz pmi cū $\frac{1}{2}$ bursa et cū tris quarti hois. ergo $\frac{4}{12}$ tcii $\frac{1}{8}$ pmi et bursa cū $\frac{1}{12}$ triōz quarti sūt quātū $\frac{1}{2}$ pmi et $\frac{1}{2}$ bursa cū tris quīti Que sicōmunit auferantur $\frac{1}{8}$ bursa · et pmi et $\frac{1}{12}$ triōz quarti remanebūt $\frac{4}{12}$ triōz tcii equales cōiuncto ex $\frac{3}{8}$ bursa et ex $\frac{3}{8}$ pmi et ex $\frac{1}{12}$ triōz. Sūt re $\frac{4}{9}$ de $\frac{4}{12}$ triōz tcii scil' tri ei sūt $\frac{4}{9}$ ex $\frac{3}{8}$ bursa · et ex $\frac{3}{8}$ pmi et ex $\frac{1}{12}$ triōz quarti hīs quod tri tcii hois sūt $\frac{3}{10}$ bursa et $\frac{3}{10}$ pmi et ex $\frac{1}{4}$ tertiōz quarti. Serua hoc tacēdo · adiuncionē proportionis quarti · cui. $\frac{1}{4}$ et bursa et quātitas pmi et sedi sicōmunit addatur tri tcii · et quarti erit $\frac{5}{4}$ triōz quarti cū $\frac{1}{4}$ bursa et cū tribus tcii et sūma sūma triōz quatuor hoīm hoc et quātū sūt $\frac{1}{2}$ pmi et $\frac{1}{2}$ bursa · cū

pmi	bursa	qrti
$\frac{1}{2}$	$\frac{1}{2}$	1
1	$\frac{1}{2}$	

sedz	hē	bursa	pmi	quarti
		$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{12}$

tcii	hē	bursa	pmi	qrti
		$\frac{3}{10}$	$\frac{3}{10}$	$\frac{1}{4}$

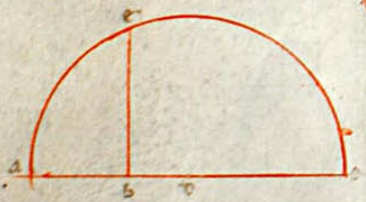
drīis quarti. Auferatur ergo cōmuniter ¼ burse-tōr quarti remanebit ¼ drīoz quarti cū dr̄ tēi quātū ½ p̄mi et 1/10 burse. Sed drīi tēi sūt 2/10 p̄mi et 1/10 burse et ¼ quarti hoīs. ergo ½ quarti hoīs cū 2/10 p̄mi tēi 1/10 burse sūt quātū ½ p̄mi et 1/10 burse. Cōmuniter auferatur 2/10 p̄mi et 1/10 burse remanebit ½ p̄mi cū ¼ burse quātū ½ drīoz quarti. Cr̄ ½ de ½ drīoz quarti sc̄i dr̄i ipi sūt ½ de ½ drīoz p̄mi sc̄i ½ drīoz ipi et sūt ½ de ¼ sc̄i ½ drīoz burse. Ergo dr̄ quarti hoīs sūt ½ drīoz p̄mi et ½ burse. Cōmuniter adūgāt drīi quarti erit ½ drīoz p̄mi cū ½ burse et cū drīis quātū quātū ē duplum drīoz quarti. Set ½ p̄mi cū ½ burse cū drīis quarti sūt quātū ē sūma drīoz quatuor hoīm. Cr̄ duplū drīoz quarti sūt quātū erāt sūma. ergo drīi quarti hoīs sūt dimidium ipi sūme. Ulterius rursus sedēy hoīem hȳe aliā medietatē eīt sūme sic sunt eīm omēs drīi sedi ⅛ burse et ⅛ p̄mi et 1/16 drīoz quātū. Nā omīs drīi quarti hoīs sūt ½ drīoz p̄mi et ½ burse. Cr̄ 1/16 drīoz quarti sūt 1/16 de ⅛ sc̄i ⅛ p̄mi et 1/16 de ½ sc̄i ⅛ burse. & omēs drī sedi sūt ⅛ et ⅛ sc̄i ½ p̄mi et ⅛ ⅛ sc̄i ½ burse sicut sūt drīi quarti hoīs. Cr̄ drī sedi et quarti sūt sūma drīoz ipōz quatuor hoīm quod ē inconueniens ut hȳe nisi eīrci quis sc̄i p̄mi ut tēi tebitii g eīt equali capitali alteri qua addito ipō capitali ydri sedi et quarti et ei sūma erūto tebito alterī nimirū remanebit sūma drīoz sedi et quarti que ē sūma drīoz quatuor hoīm. Et qm̄ uitetur sedēy hȳe maioē ꝓportionē adūctē q̄ sedēy tēi cognoscāt iterū ꝙ quetho ē insolubile sine tebito alicui cōz. Nā dri sedi hoīs sūt ½ p̄mi et ½ burse. & drīi sedi tēi sūt tēi ½ p̄mi et burse quod uitetur inconueniens ut p̄ius. & ꝙ sūt habēt ita sine ½ burse extrahant ½ et tebito p̄mi remanebūt dr̄i sedi. Si sine ½ burse extrahatur ½ tēi p̄mi remanebūt drīi sedi et tēi hoīs. Nā tēi ½ p̄mi sūt semp drīi ipi plus de ½ drīoz et ita cognoscāt tēi hoīem hȳe quātitatē tebitii p̄mi hoīs. Set ut inueniat hui⁹ quōis solutionē adde ⅛ burse et ⅛ p̄mi et 2/16 quartieī 1/10 burse et cū 2/10 p̄mi et cū ¼ quarti hoīs sc̄i drīoz sedi et tēi erit 1/16 burse et 41/160 p̄mi et 13/160 q̄rti ꝓdrīi sedi et tēi. Set dr̄ sedi et tēi sūt ½ p̄mi et burse. & 2/160 burse et 41/160 p̄mi cū 13/160 quarti sūt ½ p̄mi et burse. Et qm̄ drīi quarti hoīs sūt 7/16 p̄mi et ½ burse. erit & 13/160 drīoz quarti equales de 13/160 de 7/16 drīoz p̄mi et de 13/160 de ½ drīoz p̄mi et de 13/160 de ½ drīoz burse & 2/160 et 13/160 de ½ sc̄i 7/10 burse cū 41/160 et 13/160 de 7/16 sc̄i cū 7/10 p̄mi sūt quātū ½ p̄mi et burse quod erāt unde

mcōgruū cū 7/10 burse sint plus re 1/2 eīcē et 27/10 p̄mi sint sili
plus 1/2 ipi. Set quia uolo p̄mū hoiem hr̄e tebicū erue ꝙ prem
anet ex 7/10 burse ꝙcūl in 27/10 et debito p̄mi equale ei quod re
manet ex 1/2 burse extīcto in 1/2 exdebito p̄mi. Q. fiet 27/10 tebi
ci p̄mi hois auferue 1/2 eīcē et ex 7/10 burse auferue 1/2 eīcē re
manebūt 11/4 tebici p̄mi hois equales 1/4 dr̄oꝝ burse. Q. repi
atoi sūt duo mūa ꝙ 11/4 uni sunt 1/4 alteri erūt 1 ꝓtebito p̄mi
et 11 ꝓdr̄is burse ut p̄oiet. Q. si addaē tebicū p̄mi cū bursa erūt
10 quox dimidiū sat' 4 hūc mr̄ sedy et tcūū ex equitz tci hē 1 cū
hāt quātitatē extebito p̄mi. Q. sedes hē 4 et quatuoꝝ hē tocies cū
oꝝ sūt equāt̄ dr̄ tcū ut supi inuenim. Incip̄ capl'm quīāū decim

Intrepiendis tradicabuł q̄dratī radicis ꝙ mīcatē ꝺuisiē seu
fcīt ad inhoc de tradicū extractiōe eaꝝ i ē se ꝺ tcīū boioꝝ tī radicis ꝙ eoꝝ
capl'o quedā neciā que claues dicūtur inserere que cū radicū
sint inscd euclidis aptis demōstrationibz demōstrata. sufficī
ac sup diffinitiones eaꝝ hoc tāū scdy nūm ꝓcedē. Prima quarū ē
cū mīs duidit̄ inqualit̄ ꝓtes erūt mīcationes ipaꝝ partium
introcū nūm duisē insimul cōuūctoꝝ equales quadrato nūi duisi
sat' mīcatoi eīcē nūi inse. Vbi gā sint 10 duisa in 2 et 3 et 4
Dico q mīcationes binarii ternarii q̄narii in 10 sat' 20 et 30 et 40
equāt̄ mīcationi de 10 inse hoc ē 100 Sc̄ simūs aliquis duidat
tur inpartes et multiplicet̄ unaq̄ pars paliq̄e alii nūm multiplica
tiones omes insimul ag̃antur equabūtur mīcatoi duisi nūi ipius
nūm. ut si 10 duidat̄ insupia dictas partes et mīplicet̄ur ipe par
tes inalia quēlibet nūm ut dicam in 12 et ipe mīplicationes
cōgāt̄ sat' 24 et 36 et 60 numeru 120 sat' multiplicatoi de 10
in 12 equabūt̄. Sc̄ simūs duidat̄ indual qualibet ꝓtes erūt mīcatio
unicuiq̄ partis inse cū duplo mīcationis uni' partis alterius equal
quadrato toti' nūi ut si duidam̄ in 12 in 4 et in 7 erūt mīcationes
4 inse 24 et de 7 inse 49 et dupli de 4 in 7 sūt 70 quibz insimul
iūctis fiūt 144 sat' mīcationē toti nūi inse. Rursus si nūm dui
dam̄ indual ꝓtes erūt dupli mīcationis uni' partis introcū nūm
cū quadrato alteri' ptis equale mīcationi eīcē ꝓme partis inse et
quadrato toti nūi. Ve si 12 duidat̄ in 4 et 8 dupli multipli
cationes de 4 in 12 cū octies octo sat' 96 et 64 quibz iūctis fiūt 160 equāt̄
mīcatoi de 4 inse q̄ē 16 et de 12 inse que ē 144 Quibus similis de
usdam̄ indual ꝓtes equales et introcte ꝓtes erūt mīcatio minoris
partis ꝓmanore cū quadrato nūi qui ē ammonii ꝓtis usq̄ admedie
tatē toti nūi duisi equalis quadrato dicte medietatis. Ve si 12

* equal' quadr̃o qui fit a medietate nũi diuisi et

oundatur in z et 10 et 6 et6 ẽmultiplicato te z in 10 cũ quadra
te quaternarii qui ẽ 4 z usq; in 6 sat' 24 cũ 16 equal' milenom
te 6 nse ℔ ẽ 24 6 Si simil' diuidatur' in duas partes equales et ad
iũgatur' ei aliquis nũs ei' milenio nũi adiũcta una dimsi' erit
adiũcti cũ quĩ drato qui fit a medietate nũi diuisi' ab aiũcto cũ qua ab
uno nũo. Vbi gr̃ sint 10 diuisa 4 et 4 et addat' eis duo.
milenio quadr̃te z in 10 et in z hoc ẽ in 12 sat' 24 cũ quadra
to te 4 sat' cũ 24 equal' quadrato te 4 et 2 hoc ẽ te 7 quadra
tus ẽ 4 9 Adhuc autem ultimas duas distinctiones reclicat' o3
questiones que sũt malehra almuchabala sat' in libro cõpen
tionis et solutionis tenetz hic ẽmitat' ¶ Hoc caplm inquinqz ptes
diuidatur. Quarũ pma sit de inuentione radicũ. secda de multipli
catione eaz inter se et binomioz. Tercia de additõe cozdẽ. Quarta de
ptes extractõe admixtõe. Quinta de diuisione radicũ et binomioz.
Vm utaq; de inuentione Incipit pãs pma qĩta decimi capitli
radicũ tractare opporteat dicendũ ẽ pmũ quid sit radix. Radix
quidẽ cuiuslibet nũi ẽ. nis qui cũ in se milẽ facit pm nũm ut z sit
radix de 9 et 6 de 36 quater enim facit 9 et septies 6 faciũt 36 Ra
quidẽ nũi hũi radices et uocatur quadratus et quidã nõ quoz radices
que surde dicũt cũ impossibile sit eas in nũis inuenire. quali in
quantũ plus possimus ferre adpũs radices. uenire demõstrandum. pmus
quod uolumus inuenire radicẽ de 10 Inuenias quotẽ integrũ maiorẽ ra
dicẽ in 10 que inuenire possit eiusq; z que sit radix de 9 que 9
continet 3 et remanet 1 q' 1 diuide 9 duplicatã radicẽ inuentã scilz
6 habet 2 quĩ addeas z inuenies ex 2 z que sit pus ampli radice de
10 scz milenta 2 z Ille uũ faciũt 2 plus decimario nũo. Vñ suppus. ad in
dicẽ de 10 uenire uolueris diuide ipm 2 9 duplũ de 2 z uenit
1 z 8 quĩ abiecto 2 z erit alebus ppositũ. Et notandũ q' radix nũoz uni
figẽ ut duaz ẽ nis uni figẽ. Et ũ quatuor figũz radix ẽ nũi du
arũ figũz q' ẽ nõ ille figũz radix ẽ nis trium figũz ille addendo uni
figũ ut duaz nũi radicẽ figura una in eoz ratiõe ¶ Deĩ nõ ge
neralẽ nõ nũo sed mensuram radix cuiuslibet nũi inuenire' et ẽ ite in
uestigandi modũ. Inueniamus duo nũi qui insimul milenio faciũt. Nũm cui
radicẽ inuenire uis. medietatẽ de 10 erit illi duo nũi z et 4 ds addẽ
tes erit 7 cuiusq; mensura ordinabilis inuenta sit q. a. b. c. uidelicet
a. b. duaz ulnaz. et b. c quaz ulnaz. erit q tota linea a. c. ii ulnaz
quã linea diuidet in duo equalia secũdm punctũ d. ipuncti. a. c. sem ar
culũ circinabis. a. e. c. et apposito b. secũdm rectũ anglm linea ppendi
culũ apti ferũ sit q. b. e. que ẽ radix de 10 ut geometra apte mõstrat.



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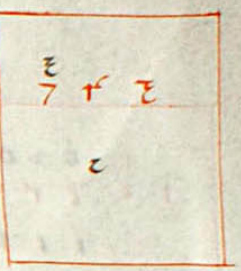
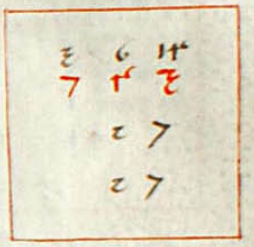
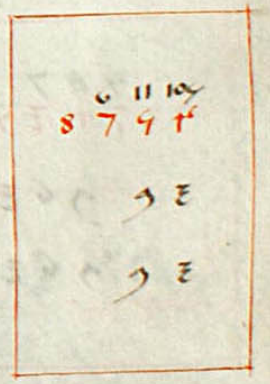
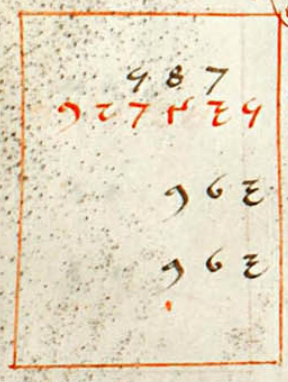
Si secdm abaci materiam radicem de 7 4 2 reperire voluerit. inemas mano
rem radicem qui 7 4 2 habet integrum que secdm hanc artem sic inuenies. scd cū
7 4 2 sic nichil erit figuram sim. quod radix ipsi e nichil duarum figurarum. ad
ultimum gradum radicis ipsius intrabis e sub secdo gradu. scd sub 4 subscd
4 ponas bis maiorem radicem qui 7 habet integrum scd ultimam figuram de
7 4 2 cit illa figura 2 qua ponta bis sub 4 mittas unum binarium postea
erit 4 2 detrahe de 7 remanent 3 que 3 pone sup 7 ut in hac prima de
scripta ostenditur et copulabis ipsi 2 cui antecedit figura scd e 4 faciet 8
per quas ponas bis tales figuras ante postremos scd sub primo gradu de 7 4 2
que cui mittas fiunt duplum binarij etc 8 has ipsi mittendo extracti
fiunt. remanent in nichil. quia cui copulabis fiunt cui prima figura de 7 4 2 scd e
2 possis in extrahendo multiplicationem postea figure sub primo gradu ite
ipsi. et no remanebit unde nichil quia excedit duplum scd radicis unitate cui
illa figura 7 q 7 bis ponas sub 2 mittendo superiorem binarium
ii et inferiorem 7 per superiorem binarium sic habebis 8 quas extrahe de 8
remanebit. 6 que pone sup 4 de 7 4 et copulabis ei cui antecedit figura
scd cui 2 erit 6 2 postea extrahe mittendo de 7 in 7 scd 4 9 rema
nebit 1 4 et sic habebis 2 7 predicte de 7 4 2 remanebit 1 4 ut in hac ulti
ma descripta ostenditur que 1 4 duude per duplum de 2 7 uel diminuendo de
1 4 scd 7 duude per 2 7 erunt $\frac{7}{27}$ quas adde cui 2 7 iuncta erit $\frac{7}{27}$ 12 pri
dicte de 7 4 2 addere radicem simplicem approximare voluerit. facies secdm
simplicem demonstrationem. Inuenio radicem de 8 7 4 .
Item similiter de 8 7 4 4 inuenire voluerit que cui sunt nichil quattuor figura
rum sibi. quod radix ultra e nichil duarum figurarum. quare sub secdo gradu
ipsi nichil scd sub 4 maiorem radicem qui 8 habet scd nichil duarum ultra
marum figurarum de 8 7 4 4 erit 2 et per 2 per
extrahe de 8 remanebit 6 sic 7 quibus copulatis cum antecedente figu
scd cui 4 faciet 6 4 per quas pone ante postremos nouenarios bis tales fi
guram qua mittendo duplum de 2 et extracta ipsi mittendo de 6 4 re
manebit nichil qui cui copulatus fit cui figura primi gradus scd cui 4 possis
in extrahendo multiplicationem postea figure sub primo gradu inde ipsi et
no remanebit in plus duplo totius radicis unitate erit 2 figura illa
qua ponta bis sub 4 ante postremos nouenarios mittendo intrabis
2 per 2 erit 4 que extrahe de 6 4 remanebit 11 que pone sup 6 4 et
copulabis 11 cui 4 que scd in primo gradu erit 1 4 per quas extrahe mittendo
plicationem de 2 in 2 scd 4 remanebit 10 4 radix de 8 7 4 4 e
integrum 2 et remanebit in 10 4 que duude duplum de 4 erunt
$\frac{2}{4}$ quas adde cui 2 iuncta erit $\frac{2}{4}$ 2 predicte de 8 7 4 4
Inuenio radicem 1 2 $\frac{2}{4}$ 4







Rursus similiter cum uolumus quemlibet figurarum uel inuenire uel diuidere
te 1 2 3 4 inuenies quod supra scripsimus ordine radicem nostrum cum
ultima earum figura scilicet te 1 2 cum 11 et remanet 2 pone ergo 11
bis sub tertio recedendo gradu et remanet 2 quem pone sub 3 et copulabis
cum antecedente figura scilicet cum 4 erit 24, per quem ponet in primo gradu ra
dicis scilicet ante positum 11 bis talem figuram qua uicem uolumus p 11
et extracta summa multationis te 24 remanebit nihil. qui copulatus cum nostro
consignato primi gradus scilicet cum 4 ualebit in extrahendo multiplicando filii figure
inse ipsa nec remanebit plus duplo inuenta radicis erunt 1 qua
posita ante utrumque 11 multiplicabo eum uicem p 11 erit 22 quem extra
hendo de 24 remanet 2 sub 4 quem copulatus cum 4 primi gradus fa
cient 24 per quem extrahendo multiplicationem te 1 superiori 1 inferio
ri remanet 24 et sic habebis nostrum primum figuram scilicet 111, pradicendo
1 2 3 4 4 ut oportet remanent supra ipsa radicem 24 quorum
dimidium scilicet 12 unde p 111 exibunt $\frac{24}{27}$ quibus additis cum 111 red
dunt $\frac{24}{27}$ 111, pradicendo te 1 2 3 4 4 Inuentio radicis .9.2.7.4.2.4.



Rursus similiter cum uolumus quemlibet figurarum unde 9 2 7 4 2 4
inuenire uel quorum radix oportet similiter ex nostrum primum figuram uel
ultimum ei gradus ponendo et sub figura cum gradu scilicet sub 4 inue
nies utique radicem nostrum quatuor ultimarum figurarum scilicet te 9 2 7 4
et hoc faciet secundum quod supra in inuentione quatuor figurarum dictum
fuimus. erunt radix illi nostrum 96 et remanet 48 ponet 8 96 bis
sub tertio recedendo gradu. et 48 ponet sub 7 4 te 9 2 7 4 et copulabis
48 cum antecedente figura scilicet cum 2 quem sub inscendo gradu. erit 48 2
per quem ponet in primo gradu radicis scilicet ante 96 bis talem figuram
quem uicem multiplicabo p 96 et extracta summa multationis te 48 2 rema
nebit nihil qui copulatus cum nostro cum figura primi gradus scilicet cum 4 uale
bit in extrahendo multiplicationem ipsi figure inse ipsa et non remanebit in
plus duplo radicis inuente erunt 2 qua posita ante utrumque 96 multa 2
p 96 uicem erit 476 quem extrahe de 48 2 remanet 7 sub 2 quod
copulatus cum 4 primi gradus faciunt 74, quibus extracta multationem te
2 in 2 scilicet 4 remanet 66 quorum dimidium silicet 22 diuide p
96 2 exibunt $\frac{11}{22}$ 1 et sic habebis $\frac{11}{22}$ 1 96 2, per quem radicem qua multa
inse ipsa reddunt plus quesito nobis quantitatem multationis ruptam inse
ipsis silicet te $\frac{11}{22}$ 1 Quarte similiter adradicem te 9 2 7 4 2 4 accedendo
uicem multa $\frac{11}{22}$ 1 inse et quod pueri diuide p duplum te $\frac{11}{22}$ 1 96 2
et q exeunt minus tempus quod dicendo intelligas precedentibus et de
omnibus aliis similibus. Est enim aliud modus per quem possimus sum
me adradicem nostrum non quadratum per quem inuenire ut relicet ut multiplicem

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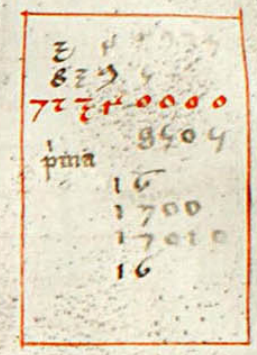
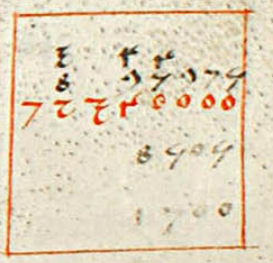
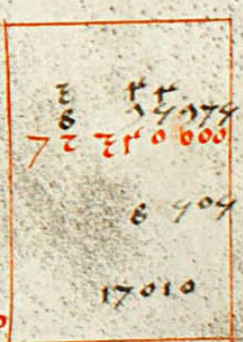
cor ꝑ aliquē quadratū nūm. et sūme radicē inuenias quā ꝑ radicē quadrati diuidas et habebis ꝓpōitū.

Volo inuenire radicē de 77 ꝑ 40000 cū aliq̄ nūm ꝑ 10000 cū radicē 100 q. q̄to ꝓmaiorē quadratū nūc tanto ꝓ̄ adradicē nūi q̄ sit de uēio. et cū aliq̄ nūm ꝑ 10000 nūc q̄tuō cū ꝯphira āte ipm addatur opz. et sic ꝓdicta mlcatiē 77 ꝑ 40000 habeo q̄z ꝑ aliū mod radicē inuenire docebo q. uē dicūē radix nūi ꝯ cuiuslibet ē nūs quatuō figūr. Q̄ ꝑē 8 sub 0 quātā grad̄ cū sint radix ꝓpōsit 77 s. nūi duar ultimar figurar habeat integrū. et mlca ꝑ 8 ise erūt 64 a quibz usq; in 77 remanēt 8 q̄ ꝑē sīt 2 et intelligo ꝯplationē eaz q̄ē 82 et duplica 8 ꝑ ima sub 0 erūt 16 e quibz ꝑē 6 sub 8 et 1 ꝓt ꝑ inuenias figurā que mlcata ꝑ 16 faciūt seruē 82 ser remanēt nūi qui copulat cū suo cū 4 sāpe gradus possit eripi coplatē erūē q̄dratū illi figure. s. mlcatuz ei nise et uoluerint remanent cū plus duplo radicis iūcte eiusq; illa figra 4 qua ꝑ ima sub 0 tenī gradus an 8 mlta 4 ꝑ 1 s. pulsa mū grad̄ de 16 erūt 4 q̄ eē he de 8 q̄ sub 2 remanz 2 sīt 8 quibz copulat cū 2 sequētibz faciūt 22 d̄ quibz colle mlcatuz de 4 isti remanebō 2 s. a. q̄ sit in secto gēu q̄z copulat cū 4 sequētibz faciūt 24 d̄ quibz abice q̄tū qui narū. s. 24 remanēt 9 sīt 4 et duplica ei ꝓpōi 4 erūt 10 sequibz pōe 0 sub ipōi 4 et 1 adde cū 6 q̄ sub 8 et sic habebis 170 ꝓ duplo de 84 cū ꝑēndū ē 0 sub 0 sedi gradus an ꝑima 84 q. mlcatio sedi gradus inquīrū. s. in 1 fuit secūd grad̄ quod locāi nō hē cū ultima figā remanentis nūi. s. 9 sic tm inquīro gradu. q̄ 0 ꝓtio duplica ꝑm faciet 0 q̄d ꝑē sub ꝑō. s. an. 170 et habeb 1700 ꝓ duplo radicis iūcte. q̄ibz mlcandi ē ꝑēnda figā. Q̄ ꝑē 4 sub 0 ꝑmi gradus et mlca eaz 1 et eē he de 9 remanēt 24 sup ipōi et 4 ꝑ 7 et eē he de 24 remanz 4 sup 0 quā gēr et 4 ꝑ 0 q̄ē sub 4 et eē he de 40 remanēt 40 et 4 ꝑ 0 q̄ē sub 0 inuēte 1700 et eē he de 4000 remanz 4000 tm inuenta sīt secūd et mlca 4 ise et extrahe de 4000 remanēt 2976 sīt 4000 et duplica 4 eī ut dicebat q̄ sit ꝑmo gradu radicis iūcte erit 10 d̄ quibz ꝑē 0 sub ipōi 4 et 1 ꝑē ꝓt ꝑm delens 0 q̄ē inuēndo loco et sic habebis 1701 0 ꝓ duplo radicis iūcte ut in ꝓba patet de scīnde et radix ē 8404 et remanz 2976 Que si ꝑbare uoluīs pensa de 77 ꝑ 40000 cuius q̄ē 4 ꝑ septenariū et pensa de 8404 q̄ē 0 ise mlca, puēiet 0 q. adde cū pensa d̄ 2976 q̄ē 4 faciūt 4 ut ꝓpensa fuisti. q̄z ꝓdine gelbe diuide 2976 ꝑ 17010 ueiet cū quarta et sic ꝓdicta d̄ 77 ꝑ 40000 habes 8404 q̄ diuide ꝑ 100 erūt 84 ꝓdicta d̄ 77 et







Incipit pars sedi quar tradeam capli dmisq̃ca tradicũ 7 de binomioꝝ

Quoꝝ cũ sit multiplex figũa aliaꝝ & impar tñ apparet ẽ mentionẽ ꝛ
dicas ipi' numeꝝ ultime figũe tñ 7 reliquis ꝑcedẽtibꝫ dabis
ẽ stensa sequẽte doctrina inuestigandis radicibꝫ miõꝝ. ne q̃ seruꝫ
in hoc capło uel sedy mihi demõstrãdi distinctionẽ duaꝝ linearũ
rõnalium. sc̃ di q̃ ꝑ eucliois lib geõmetrie dicat assignãre dispa
rũ ꝓma quãdo linee dr̃ rõnal hoc ẽ rõnalem longitudine ex po
tenta ꝑ̃ intelligãt mihi rõnalem ut 1 7 2 et 3 ceteri. Cui q̃ssi radices. ẽ eoꝝ potentie similit rõnales. q̃ exemplificatione cuilibꝫ mihi inse nihil ꝓmittere necesse ẽ. sedi uõ dr̃ rõnalem ꝓtenta solũ ꝑ q̃ intelligãdis mihi nõ quadrata q̃drata dr̃ surda cui nihil nõ possit ꝛ ei ꝓtenta mihi. Irrationalẽ aũt linee rõnales ꝓma ẽ simplex que uocat medea ꝑtenta ẽ rõnalem que uocatur sic fiat medea. Sed q̃ media impro ꝓrie nec dicat sic fiat ꝓtenta solũ ꝑ mensurabilis. ꝓhibẽ quidẽ h nean intelligãt radix radicis mihi cui ꝓtenta ẽ radix mihi cũ nõ quadrata ẽ sc̃ omnes radices mihi nõ quadratas medie nec duos mihi dissimi les. hoc ẽ quarũ hñt ꝓportionẽ. nec se sic quadratus mihi adquadra tũ mihi. ut sint mihi fiat 10 7 alt 12 medius nec eos cadẽ radix de 120 qđ ẽ 10 ẽ addita ẽ 120 tota radix de 130 ẽ ad 12 cũ eam lẽtẽ ꝑ mi nutiũ fiat milãno sedi mihi. Irrationalis duodeni lineꝝ sc̃ fit ra dicem mihi ẽqualiter erduoly, nõily. Cetera reliq fiũt radices dẽqualiter eque ẽ simi. Cui aũt qui fit ẽduoly nõily diuidẽtur inse pro ce quales. Primi binomium ẽ q̃ cuilibẽ eorũ radice 7 ꝓtenta mihi sup̃addatur ꝓtenta radicis sui quilibẽt aliquã quadratã mihi. ut ꝓtentis fiat 4 sit radix 7 sit 16 ꝓtenta 4 q̃ addit 9 sit 7 ẽ q̃ quoꝝ binomii ꝑ ei radicẽ 7 mihi ẽ ꝓtenta ra dicis addẽ [illegible] sit ꝓtenta minoris nõis. s. sit ꝓtenta tũ mihi [illegible] sit radix 112 7 minꝰ nomẽ fiat radix 7 radix de 112 ꝓter 63 sup̃ 9 quinis 63 ẽ simile 112 cui ꝑ ꝛ quadratus mihi 16 adquadratũ mihi 9 cui aũt bino mihi ẽ q̃ cuilibẽt ordinatis radicibꝫ ꝓtenta solũ ꝑ similibilis. hoc ẽ quod quadratus nõis nõ hñt ꝓportionẽ nec se sic quadratus mihi. adqua dratũ mihi 7 mihi. Et maꝰ nomẽ ꝑ plus minore sedy quintũ mihi ꝑ silie ꝑ nõis ꝓtenta. ut sit maꝰ nomẽ fiat radix 112 minꝰ ex 81 cuius duobꝫ nõily 112 addit 78 sup̃ 81 quoꝝ ꝓportionalis de 112 ad 78 ẽ sic quadratus mihi adquadratũ mihi. Quarũ quidẽ binomiũ ẽ cuiꝰ ꝑmꝰ ꝛ maꝰ nomẽ s. mihi nõ ꝑ nihil quadratus mihi si minꝰ nomẽ ut 4 7 radix de 10 ad 16 ꝛ quadratus 4 addit 6 totum nõ quadratũ. sic de 10 quilibꝫ sup̃ binomiũ ẽ q̃ cuilibẽt eorũ binomii sedi. ꝛ quadratũ radicis addit totũ sibi dissimile ꝛ quadratũ mihi. Verũ ꝑmũ nomẽ

fiūt radix de 20 sed hec tm 2 am si 20 hinat 11 quadratū cuiꝰ 7 ppo
tio 20 ad 11 nō ē sic quadratus nūs ad quadratū nūm. Secūd hui⁹
binomiū ē exēplū tēu. Ex quadratū maioris nūos pōt nūm ē
dissimilē sic quadratū maioꝝ. Ve radix de 20 et radice de 8 ā 20 ad
duit 12 sic 8 ppōrcabit 20 ad 12 nō sic quadratū nūs ad qdtū nūm.
Rimi quid binomiū radix ē unū exclusiue sequit sequ
alud binomiū mīcatur inse figit 1 binomiū pmū. sed quippe
binomii radix ē linea ꝙpōta ex duabꝰ mediabꝰ lineis potētia solū
cōmēsurabilibꝰ ē hꝰ ē ꝙpōtū ex duabꝰ rōnalibꝰ dūtaxat rationis incōpo
tētia solū cōmēsurabilis ex quibꝰ tōtum mīcatꝰ ī aliā pducit nūs rōnalē.
Ve radix radicis trium 7 radix radicis de 7 Tertii quoq binomii ra
dix ē linea que dī bi medial' sue ex duabꝰ medijs sedens ꝙpōtā intelligi
quūcūq ex duabꝰ radicibꝰ radicis tātū potētis tm cōmēsurabilis ex
tōtum mīcatꝰ in aliā pducit medium. s. radix nūi nōs dicim. Qua
ti quippe binomiū radix ē linea q dī maior hoc ē ꝙpōtū ex du
obꝰ nūs incōmēsurabilibꝰ tm̄ potētia cōmēsurabilibꝰ facit quadratū cuiꝰ
facit nūm rōnalē. Et exēplatione huiꝰ mali figit radix nūi
rōnalis. Ve sūpta fiūt radix ex de 4 7 ex radice de 12 7 alia fiūt
radix de 4 mīs radice de 3. Quinti aūt binomii radix ē linea q dī
riton 7 medii ꝙpōtēs sue potēs sup rōnalē ex incōmēsurabilē sibi. ꝙ
pōtur ex duabꝰ lineis potētia tm̄ incōmēsurabilibꝰ que quidē intimat nūm
facit radicē nūi 7 ex multiplicatē unī alia ꝙpōtā nūs rōnalē.
Ve sūpta fiūt radix radicis de 20 ex de 5 7 alia fiūt radix de 20
mīs 5 Sexti aūt binomii radix ē linea q dī duo media pōtēs
sue potēs sup duo rōnalia nūos ꝙpōtur ex duabꝰ lineis potētia tm̄
cōmēsurabilibꝰ que quadratum insimul nūi facit radicē nūi 7 ex multipli
one unī alia figit similē radix nūi nō quadratum. Ve sūpta fiūt radix
radicis de 24 ex radice de 7 alia fiat radix radicis de 24 mīs radi
ce de 7 Septimi aūt quidē fit de pōtia exponēs nōiāt sex binomios no
cātur recti seu apotheami 7 fit illud pordinē quod ē inter utrūq
nom pōtēs sex binomios ut 4 mīs radice de 3 7 q̄ pmū recti fit
radix de 112. mīs 7 que fiūt ex tā recti radix de 112 mīs radi
ce de 84 qui fiūt ex tio recto 7 sic intelligē de quarto et quinto ex
sexto recto. Ut radix pmi recti 7 unū ꝙpōtū cui dē radix ut
sedi ē recti bimediat' pme hoc ē radix radicis mīs radice radicis
ex tā mīcatione pducit nūs rōnalē seu aūt radix ē recti bimedi
at' sedi hoc ē radix radicis mīs radice radicis ex tā mīcatione pducit
nūs rōnalē. Quarti quoq recti radix ē que fit ex duobꝰ ꝙpōtis ꝙ
rum due lineē q fiūt potētia incōmēsurabiles. ex quibꝰ ꝙpōta linea nūs.

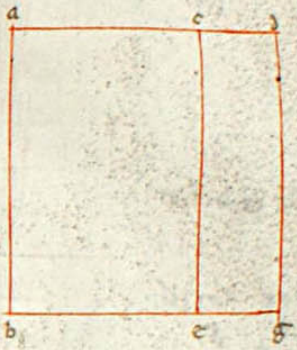
Quinta itaque regula est que docet extrahere quod
as linealis potentia in quo missa habiles exquisiti
sup radicem cum innominati. Sexta namque regula est. q̄ docet ex
residuo quod est me duas lineas potentia incommensurabiles exquisito
petitur linea potens sup irrationali. tractatu. his itaq; peractis dicimus
tis qualit. Ip̄m̄ autem me se addi ut ech̄i seu diuidi tetrag ordina
re demōstrato. Pars secūda de multiplicatione radicū mediab; q̄ mūs

Sunt mediales radices surdi ut irrationales aliquales
mūi p̄dicēs sūt alteri. media mūi exempli mūs p̄ limi quot p̄ueit
eis quadrate sūme mediatois ut p̄dicti. Verbi gr̄ uis mediale radi
cem 10 p̄dicēte 20 media 10 p 20 fit 200 ut radix est sūma me
diatois quesite. Verbi gr̄ sit. a. radix 10 et. b. 20 et adiaceat. g.
equal. a. et d. equal. b. g. g. est radix 10 et d. 20 & cū mediato. g.
m. a. hoc. est. a. inse ueniūt 10 et cū media. d. i. b. hoc. b. inse fa
ciūt 20 & cū mediato 10 p 20 tūc media fiet. ex. g. a. in fiet. ex. d. b. &
mediato fiet ex. g. a. in fiet. ex. d. b. est 200 Sz mediatoi fit. ex. g. a. et
fiet ex. d. b. existūt mediato. fit. ex. a. b. item. ex. g. d. & mediato fit
ex. a. b. in fiet ex. g. d. est 200 Sz fiet ex. a. i. b. equat fiet ex. g. m. d.
& mediato fit ex. a. m. b. p fiet ex. g. m. d. equatur mediatoi fit ex. a.
b. ise & mediato fit ex. a. i. b. ise fiet 200 Et fiet ex. a. i. b. silicet
ex radice d 10 in radice 20 est radix ducentor q̄ opponebat ostende.
Item simus mediale radices de 20 p̄dicēte de 40 media 20 p 40 fit 1200
quor radix que est surdi hoc est irrationata est sūma quesite mediatois.
Et nota cū mūi quor radices mittat sic similes hoc est q̄d unit, apportat
inter se sic quadrate mūs ad quadratū mūm. tūc ex eor mediatione pue
niet mūs rationalis. Verbi gr̄ uis mediale radicēs de 40 p̄dicēte d
90 media 40 p 90 erūt 3600 quor radix est 60 inquiūt mediatio assed'
p̄cepta fiet 60 media inproportione inter 40 et 90 scilicet 40 ad 60
ita 60 ad 90 et quisq; sic 90 ad 60 ita 60 ad 40 hoc est q̄d euclides osten
dit cū dicit inter duos numeros similes unū inter eos cadit numerus
ratio cognoscendi numeros similes diuide utrumq; illor p̄mutatione. simili
tate quam habet ex quadratione siquidē unus quadratus tūc similes est.
Vel cū diuiditur unus par similis exipa diuisione. p̄ueniet semp una
quadrata sicut cum 10 cois mensura et maxima de 40 et 90 q̄ diuidit
p 10 uenit 4 et 9 q̄rum sūt quadrata. Vel diuidatur 40 p 90
ueniūt 4/9 q̄rum est quadratus et radix est 2/3 q̄ repetit est hic q̄rtus et 40
exquisita acc̄ tertiocel. et haleb 2/3 et 9 q̄ 2/3 diuisi p 2/3 reddūt 1
sūt 40 diuisi per 40 ueniet 9/4 q̄ et quadrate. 3/2 et eor radix
2/3 q̄ sūt radices de 40 et 90 Et sunt mediales tres

radicel d 10 m quatuor radicel de 10 redigel ꝫ adm̃licatem̃ m
dicis hui⁹ nū̃ m radice alteri hoc modo ꝓtribz radicibz de 10 mlta
ſ̃ ternarii ternarii .ſ. 9 ꝫ 10 erũt 90 quoz radix equatur tribz m
dicibz de . 10 Eo tenaz modo mltato quadrato d 4 .ſ. 16 ĩ 10 red
dz radices de 40 ꝓquatuor radicibz d 10 erũt ſic̃ ml̃cate d 90 ĩ
40 radices accepte .ſ. d 8800 hebr̃ unaz ml̃cate trium radicũ de 100
m quatuor radicibz d 10 / adiacent quadri latez recti anglĩ
equilatez . a. b. g. d. ẽ area ſiue ulnaz 10 erũt quodliber latus
ipſi⁹ ẽ radix de 10 que radix ꝙ ſit plus quadrario accipiat̃ ĩ recta
b. g. puncto. e. ſit recta . b. e . quadrio ulnaz cui equal̃ ſit recta.
a. c. ꝛ copleat̃ recta . e. c. ꝛ fiat̃ ſ̃. a. b. e. c. ꝙtuor equatio⁹ m
dicibz d 10 cui ſuperficies aree colligi exducta . a. b. erit ẽ. a. b. radix
de 10 . b. e. ẽ radix d. 16 q̃ aree ſuperficiei . a. b. e. c. colligi ex
ducta radicem d 10 ĩ radicem de 16 equa ml̃cate ꝓuenit radix de
40 ut ꝓdixi. Ex hoc enim ꝓteriſ lyre doctrina reducendi plures
radices uni⁹ nū̃ ad radicem una. Ve ſiunt rectigle ſue radicel d 10
ad radicem una ml̃ta quadratũ de 6 .ſ. 36 ĩ 10 ꝓueniens 360 q̃
radix ẽ radix q̃ quesite. ¶ Ex ſiunt ml̃cate alig̃ numi ꝓradicem ali
cui nū̃. q̃ unitates erũt in ꝓ nūo . tot radices eſſe erũt radica
ĩ q̃ nūm ml̃care uel equa ml̃cate ꝓuenit. Vbi gr̃a ſiunt ml̃
cate 6 ĩ radicem de 10 unaz ſue radicel d 10 ꝓuenit. q̃ ſit ra
dix d 360 uel ꝓdixi . Ergo ꝙmltatione de 6 ĩ radicem de 10 ſiunt
radix d 360 et ſic ſimiliter faces ĩ ſimilibz De multiplicatione radicis

Si vis ml̃care radicem radicis alicui in radicem radicis
nū̃ ꝓradicem radicis alteri ml̃ta unū equale nū̃ in alterum uel qua
drate radicem radicis ad eo . ſi ualet ſumma quesite ml̃cationis. Et no
ta q̃ q̃n ml̃cat̃ numus radicis nū̃ ꝓradicem radicis nūe equali ml̃ta
tione ꝓuenit nūs aut̃ nūs nū̃. ſiue radix radicis nū̃ . Vbi gr̃a
ml̃cat̃ radicem radicis trium ꝓradicem radicis d 7 ꝓuenit radix radicis
de 81 q̃ ſumptis ex ductis 7 ĩ 7 fiũt 49 radix 81 ẽ 9 q̃ radix .ſ. 7
ẽ ſumma quesite ml̃cationis. ¶ Similiter ſimilem radicem radicis d 96
ꝓradicem radicis d 16 ꝓuenit nūs rōnalis q̃ ex ductis 96 ĩ 16 fiũt
1536 quoz radix ẽ 144 quoz radix .ſ. d 144 ẽ 12 q̃ ſit ſumma que
ſite ml̃cationis. ¶ Ex multiplicatione quide radicis radicis
duoz ĩ radicem radicis d 18 ꝓuenit radix nū̃ q̃ ex ductis 18 ĩ 18 ꝓ
uenit 324 quoz radix que ẽ 6 carent radice. ſ. ex ductis ml̃ca
tione fiunt radix d 6 . ¶ Similiter ex ml̃catis radice radicis 8 in
radicem radicis de 18 ꝓuenit radix d 12 . q̃ ex ductis 8 ĩ 18 ꝓuenit
144 qui nūs ẽ quadratus cui radix ẽ 12 quoz radix q̃ ẽ ſuperficies

Nã ſi a dodrin d phẽde nūs quo qua
tuoz radices d 10 ſ̃ radix d 360.



ſūma queſita ut prędixi. Et ſic ſimilē radicē radicis 10 prędicē
radicis 17, pueit ipſi mīlatē radix radicis mii nō quadrā. ſ. d. 170 Silr ex
mīlatis radicis radicis 70 in radicē radicis 70 ſurgit radix radicis 600
Demōſtratio diuīs radicū radicis q̄ i ſimīl mīlatē facit ut ſupra

Si duo numeri diuīſi radicē radicis mii nō quadrā mīm faciāt
numerū ſi ex proprio mīlatione adiunctē pueit aliquid dictū nūs. ſit nūs
a. a quo ab mīlato faciat mīm. b. quo diuiſo duplo faciat mīm. g.
Et mii. d. & radix radicis mii. g. & alii mii nō quadrati quibus d. adiun
ctus. g. pd. pueit mii. e. ſm diuiſiōē & mii. g. pmīm. d. reſol
uīōne, pueit mii. e. ſimlēt. d. pd. nimirū pueit. g. & radix radicis
& mii. a. ſ. et radicē radicis mii. d. pmīlatā prędictē radicis mii. e. p
ueit radix radicis ſūpd. m. e. & mii. g. & radix radicis & mii. a. Et
inuentē ſūt duo radicis radicū mīoꝝ nō quadratoꝝ que cōiūcte mīm
dant. a. Nō & mii. e. & quadratus. ei mii. d. nō ſic quadratē reſolue. i. e.
pueit mīe q̄ adiūcte. g. vn̄ primo. g. ad. e. & ſic primo quadrati mii
ad quadratū mīm. Et ut in mīs oſtendatur mii. a. ſit. 17 Et mii. b.
erit 144 mii. g. erit 7056 mii. d. ſit 96 adiunctē 7056 p 96 p
ueiēt 216, pmīo. e. Et radicē ex g & radicis de 96 ducta in radicē radi
cis de 216, pueit mii. a. dictus.

Et ſimꝫ replicēt duas radicis radicis duoꝝ mīoꝝ nō quadratoꝝ equaꝝ mī
catē, pueit radix alicuius mii nō quadrati ut radicis de 10 mīcā 10 ſit erit 100
et adiacent nūs alicuius nō quadrati ſimꝫ 4 in quibꝫ duplatē 100 in
erit. 70 Et reducti 4 in 70 fiunt 100 ſ. quadrati de 10 & ſimīlēs
radicē de 4 in radicē de 70 fiunt radicē de 100. ſ. 10 Eodemq; m ſimīl
cis radicis radicis de 4 in radicē radicis de 70, pueit radix radicis 100 ſ
& radicis de 10 ſ hoc que rebant. Demīlatē radicis radicis radicē mii
Et ſimīl mīlatis radicē radicis de 70 in radicē de 10 mīcā quadrati de 10
ſ. 100 p 70 erit 700 quor radix radicis & ſūma dictē mīlationis. Quia radix
de 10 & radicis radicis de 100 Et ſimīl mīlatis radicē radicis alicuius
mii paliquē mīm ut radicē radicis de 17 p 7 mīcā quadrati quadrati
de ſ. 24.01 per 17 erit 28817 quor radix radicis & idq; queſit.
Explicāt pāſſus ſcdꝫ tertia d' adductiōe et extractiōe radicū in ſe et reliqua

Superis addendū mīm radicis ſimplicis. ſ. ei radicē mii duoꝝ ſimpliciū nūoꝝ
nō quadratoꝝ ut radicē ei mīo. & hoc aliter per binomii euenire nō
poſſe demōſtrato. Sit itaq; nūs linea. a. b, b. c. ſit radix. q̄ tota. a. c.
& ſūma ſectionis eaꝝ. Et q̄ hēt. a. c. numꝫ & medio rationale. b. Erit duo
quadrata linearū. a. b. et b. c. ei duplo mīcationis. a. b. in. b. c. equalis q̄
drato totius lineę. a. c. & eam nūs utiq; quadratoꝝ habent. a. b. et b. c.
q̄ ex eaꝝ adiectē pueit nūs. Et reducti duplū. a. b. in. b. c, pueit in

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dices. equales radii .b.c. sed̄ unitates que sūt rnduplo. ꝑ mū .a.b. ꝯ ipse radices erūt una radix cū .alie mū nō quadrati. Quia ꝓpterea ꝙ drati linee .a.b. adquadratum linee .b.c. nō ē sicut quadratꝰ nūs ad quadratū nūm. Ergo ꝯsimilitr linee .a.c. ꝓuenit binomiū sp̄ cum demōstrato inſequentibꝫ ē binomiū ꝑmū. Q̄ liēa .a.c. ē radix alicuius binomii. Cōstat ꝙ ex nūo rnadice. Et uerū ꝓpter demōstrēt .a.b. sit ꝑ rnb.c. sit radix ꝙ rnaddat quadrati linee .a.b. rnb.c. fiat 16 cui ꝙ erit 32 rnacipiatur dupli mixtoꝝ .a.b. m.b.c. ꝓuenient octo radices de ꝙ que sūt una radix ꝑ ꝑ 8 ꝓpterea ꝓpositio octonarij ducto ī ꝙ Ergo reducat̄ ad unitatē re ꝑ rnradice de ꝙ Sic ueniunt 32 rnradix de ꝑ ꝑ 8 Q̄ radix cōp ē ꝑ rnradix de ꝙ Deī ꝑ rnradix de ꝙ nō pōt aliter aggregari nisi accipiatur radix de ꝑ ꝑ 8 qui ꝑpter ꝓpositū addat cui 32 rnei ꝙ ꝓpterea accipiat radix ul̄ accipiat radix de ꝙ et addatur ei ꝑ rnhabebis id ꝙ nūs erupta quinte hui ꝓpositi. Vbi gñ radix de ꝑ ꝑ 8 ē pars minꝰ de 6/12 quibꝫ additis cui 32 fiunt fere 2 ꝑ ꝙ quoꝝ radix ē pars minꝰ de 2/6 ul̄ quia radix de ꝙ ē pars minꝰ de 2/6 fiat addimē cui ꝑ ueniens simili pars minꝰ de 2/6 addatur ꝑ cui radice de ꝙ Et nota cui uis miscere aliq̄ binomiū ē nota sine ex nūo rnradice huic facies sic fecimꝰ nō ex ꝑ rnradice de ꝙ et mitte ī se faciet 32 rnradicē de ꝑ ꝑ 8 Nec ē ꝓpositū aggregare simil radices nūoꝝ nō habentiū ꝓportionem ut quadratus nūs ad quadratū nūm. Excepto casu si sit una ex radicibꝫ ipſ aggregate unius linee .d.e. rnalia sit .e.ſ. ita quadratus nō sit ꝓportionalis ut quadratus nūs ad quadratū nūm. Q̄ tota .d.ſ. diuidi ē ex duobꝫ mediis rōnabilibꝫ tm ut ſpera Et ꝓportionē .d.ſ. diuisa ē in duo. quadrata linearū .d.e. rne.ſ. cui duplo .d.e. ī .e.ſ. equalis quadrato tocius linee .d.ſ. Nam ex ꝯuicto quadratoꝝ linearū .d.e. rne.ſ. ꝓ uenit nūs. Et ex duplo .d.e. m .e.ſ. ꝓuenit radix nūi. Ergo ex ductu .d.ſ. in se ꝓuenit nūs rnradix nūi. Q̄ quidem ex mediis .d.e. rne.ſ. silz .d.ſ. ē radix nūi rnradicis. Et uerū in nūis demōstrēt. Sit .d.e. radix ꝙ 12 rne.ſ. sit radix de 10 quare quadratus totius uicti fiunt 32 et ex duplo mixtoꝝ radicū de 12 in radice de 10 ꝓueniūt due radices de 120 hoc ē una radix ꝑ 80 ē ex ꝙ cum canone radicū de 12 rnd 10 ꝓueniūt 32 rnradix de ꝑ 80 cui binomii radix ē quidem ꝓpter dicē radice de 12 rnradicē de 10 qui radicē de 32 rnradice de ꝑ 80

Demōstrato itaq̄ quo modo equalitas binomio ducto in se ꝓueniat binomiū ꝑmū sit quod̄ binomiū linea .a.b. cui nomina sint .a.g. et .g.b. sitq̄ quadratus .a.g. sit nūs .d.ſ. quadratus .g.e. ex .e.g.b. sit nūs .ſ.e. rnduplo. a.g. in .g.b. ꝓueniat radix .e.ſ. dico ꝓtinus .d.ſ. ē binomiū ꝑmū. Q̄

ꝙ duplo .a.g. ī.b.g. ꝓuenit .e.l. ergo ꝙ .a.l. ī .b.g. ꝓuenit me
dietas ꝙ .e.f. que medietas sit .e.t. erdiuidat̃ mīa .d.e. in duo
equa sup ꝓuenī .k. qui ꝓuenit addit me .d.ꝯ. Qui quadratus m.no
ris binomii .a.g.b. demōstrād itaqꝫ ē ꝑmū quod dimidiū quadrati
sūtotius .a.g. ad g.b. sup habundāt mediatē ꝙ .a.g. ī .b.g. qm .a.
g. maior ē quantū .g.b. adiacent quantitati .l. eiusq; quantitati ī qua
g. sit hūdat .g.b. erūt .g.g.b. ī .l. equales mīo .a.g. ꝙductu qꝫ
.a. in se ꝓuenit id qꝫ ꝙductu .a.g. in .g.b. l. Qđ quadratus mīi .a.g. sit
hūdatus mediatis .ꝙ. a.g. ī .b.g. ī mediatē ꝙ .a.g. ī .l. hoc ē in .g.b
.l. ꝫ quadratus qui fit ex .b.g. sup hūdat̃ ait̃ figurā que sit ex .g.b.
ī .g.a. hoc ē in .g.b. l. sed id qđ fit ꝙductu .g.b. ī .l. plus ē sup
hūdatus quadratus qui fit ex .a.g. superficiem que ē ex .a.g. ī .g.b. ꝙ
ipi fit figura ꝙ sit hūdatus quadratus qui fit ex .g.b. Qđ duo quadrati hūdi
a.g. ī .g.b. silicet mīa .d.e. sup hūdat duplū superficiei .a.g. ī .g.b.
silicet superficiē .e.l. Qđ medietas mīi .d. silicet .d.k. sup hūdat
dimidiū .ꝙ. e.f. silicet superficiē .e.t. q̄ oportebat demōstrare.
Et quia ꝙductu .a.b. ī .b.g. ꝓuenit .e.t. ergo ꝙductu quadrati
qđ fit ab .a.g. in quadratū qui fit ab .g. silicet ex mīo .d.g. in se
ipm sibi quadratus qui fit a radice .e.t. Et qui mīs vocatur .d.e.
diuisus ē in duo equalia sit ꝓuenit .k. et in medietate in equalia sit
ꝓuenit .g. cui mediatio mīi .d.g. i mīm .g.e. cui quadrato mīi ran
gnati .k.g. equat̃ quadratus mīi .d.k. sit cui mīo .d.k. medietate
mīi .d.e. qđ quadruplū mediatis .d.g. ī .g.e. silicet quadruplū
quadrati qui fit a radice .e.t. cui quadruplo quadrati qui fit a mīo
k.g. equatur quadruplo mediatis .d.k. in se. ꝫ quadruplū mediatis
d.k. ī se equat̃ mediatī mīi .d.e. in se. Sibi et quadruplū quadrati
qui fit .ab. e.t. equat̃ quadrato qui fit a toti radice .e.f. Ergo ꝙ
drat̃ qui fit .ab. e.f. cui quadruplo quadrati qui fit a mīo .k.g. ejus
quadrato qui fit a mīo .d.e. Ergo quadratus qui fit a mīo .d.e. addit
sup quadratū qui fit .ab. e.f. quadruplū ꝙdrati qui fit .a.k.g. ꝫ
duplū quadrati qui fit .a.k.g. equat̃ quadrato qui fit a duplo mīi .k.g.
est enī mīs .k.g. vocat̃. qui cui ex .d.g. vocato auferet̃ .d.k. vocat̃
.s. dimidiū .d.e. vocati remanet .k.g. vocatus. Qđ erat duplū
el ē vocat̃. Ergo quadratus mīi .d.e. sit hūdat quadratū radicis
e.l. sed superficiē mīi. Qđ erat .d.f. ē binomiū ꝑmū q̄ oportuit
hic ostendere.

De extractione Radicum.

Sunt ēt̃ radices surdi d mīo vocato vel mīm d radice surdi aut
radices d radice qui sit potius solū enūsinabiles. hoc ē quod ꝓpo
quadratus ꝓpo rille vel qđ nisi ad quadratū mīm. ꝫ sicut no ꝓpo

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ur in remaneat nūs rōnatus. sit cū quadrato residui hartī q̄tionū
resilī pmū. que sī nūs ihē unū habitur p dq̄nq̄ sic̄ radicē de 7
remanebūt p minꝰ radice de 7 qrtilī. q̄ si inse miscātur uns. adde qd
dratū de p cū quadrato radicis d 7 erūt 7 requibz q̄bz duplū mi
cationis de p 7 radice de 7 remanebūt 7 minꝰ radice de p p 8 q̄s
pli cū lic̄. a.b. sit p .b.g. sit radix de 7 sq̄ q̄dratū de p .g. q̄. 4.
remanet resilī .g.a. quolum inse miscātur. q̄m linea. a.b. diui
sa bifariā sic̄ pūctū .g. erūt duo quadrata lineaꝝ .a.b. .b.g. q̄libz
duplo miscatoris .b.g. i .a.b. 7 quadrato lic̄ .g.a. Q̄re si tetquadratis
lineaꝝ .a.b. et g.b. hoc ē de 7 auferat duplū sic̄ linea que fuit ex
g.b. in .a.b. hoc ē radicē de p p 8 remanebūt 7 minꝰ radice de p p, p qui
dto resilī .g.a. que sit resilī pmū. cū 7 fiūt 81 qui ē quadratꝰ
nūs sic̄ p p 8. Similiꝰ sunt q̄libz 7 q̄tradice de 117 remanebūt
tūc radices de 117 minꝰ p quesito residuo. q̄si inse miscātur uns adde
insimul quadratoꝝ pdtoꝝ nōiā .s. 117 7 p 9 erūt 161 requibz q̄bz
miscatem dupla de 7 radice de 117 remanebūt 161 minꝰ radice
de 7 194 sic̄ simul q̄libz radices de 10 q̄tradice de 70 adde 10
cū 70 erūt 80 dequibz q̄tuabz duplū miscatoris radicis de 10 in radice
de 70 remanebūt 60 minꝰ radice octuagēsoꝝ. dequibz accipe radicē
q̄ habeb quesitū. Vt, p quesito residuo sic̄ radicē de 70 minꝰ radicē de. 10
Sciāt uns adde radicē cū radicibz sibi mixtis q̄mplibz. Vt una de
alia q̄tuabz hoc ē p pōtib er egdictur inde semp radix nūi rōnalis. Ve
simul adde radicē de 18 cū radice de 72 quoꝝ nūoꝝ, p̄ portio ē sicut
q̄dꝰ nūs 9 ad quadratū nūm 16 hoc cū sumet ex p̄missa doctrina. s.
adde 18 cū 72 erūt 40 cū mixta radicē de 18 p radicē de 72 ueniet
72 q̄ duplū addecū 40 erūt 98 q̄s radix ē summa quesite additionis. Ab
radicē illoꝝ quadratoꝝ nūoꝝ q̄s, p portione habēt 18 et 72 s. de 9
de 16 in simil adde 7 q̄ mixta inse erūt p 9 q̄ mixtū 7 que, p ueniūt
ex 18 diuisū 9 ut ex 72 diuisū 16 erūt 98 q̄s radix ē summa
q̄situs pdtꝰ. Et nota q̄ radix duoꝝ p̄ceptoꝝ s̄ simplis medietas
radicis d 18 ad 72 Sit cū radix binarii 7 in radice de 18 7
q̄libz in radice de 72. Ergo p̄mus in hac addicat tres radices
quarti binarii. que sūt insimul septē radices de 72 hoc ē una
radix de 98. Q̄re si radicē de 18 d radicē de 72 q̄libz uns q̄libz tres
binarij radices q̄tuoꝝ radicibz ei tūc remanebūt cū una radice
binarii, p̄cisius pdtꝰ ex ictis. Vt inuenta p 8 extrahende 40 re
manebūt 72 et q̄s radix ē residui quesiti.
Item sint adde radicē de p 8 cū radice de 10 8 q̄s nūoꝝ, p̄ portio ē
sic 16 ad 72 tūc uns quibz alt̄ eadē simpl̄ sui oppositi. q̄ sic 18

a b

tripla sūt de 16 cū 108 sūt tripla de 6 . addes ergo radicē de 16
cū radicē de 6 . s. 4 & 6 erūt 10 q̄z quadratū mīcāt̄ 2 tripli
mes p̄dcās erūt 20 q̄z radix ē summa p̄dcē mīcōis. Vel adde 108 ē 8
erūt 146 quibz adde mīcōis radicē de 8 & radicē de 108 9/10 s. 11 erūt
20 q̄z radix ē quesita. Cū sint radicēs de 8 cēhē cenradicēs de
108 cēhē radicēs de 16 cenradicēs de 6 remanebūt 2 q̄z quadrato
mīcato per 2 & triplicatis p̄dcis fiūt 12 q̄z radicēs re-
sidui que sūt cenāt̄is. ut in numeris 4 & extrahende 146 remane-
bunt 18 & 12 q̄z radix ē residui p̄dcī cenāt̄is ut p̄dixi.

Cē sint aggregate 4 cū radicē radicis de 10 scēdm vulgarē modū
accipe radicē radicis de 10 q̄s ē pars min' de 1/4 & adde eī cū 4
erit pars min' de 4 1/4 & si 1/4 cēteris de 4 habebis residuū q̄d in-
4 & radicē radicis de 10 Queri magrālē sūcē uīs mīcā 4 & radi-
cē radicis de 10 inse q̄rūt̄ mīnca demōstrat̄ sic. a.b. 4 & a.b.c.
sūt radix radicis d' 10 . erūt ergo linee a.c. duplū indūo. Cū duo
q̄drāta p̄portionū. a.b. & b.c. cū duplo. a.b. in b.c. faciūt summā q̄dr
tī. a.c. q̄drī cuius. a.c. sūt ē q̄drata p̄portionis. a.b. & p̄portionis. b.c.
& radicis de 10 & duplū sr̄mēi. a.b. in b.c. & octo radicēs radicis d'
10 & nouē digitī. minima radicē radicis de 9/10 duc cū octo inse fiūt 6 &
quinq; nōs ducti faciūt 96 quibz ductis p 10 faciūt 9 60 q̄z radix
radicis cūst octo radicibz radicis de 10 & p̄sūm mīcāt̄ hīnē 16 &
radix de 10 & radix radicis de 9/10 60 . Cū radix cōe tū nōiūm ē ad
dūcēdo & radix radicis de 10 cū radicē scēdm q̄mq; mōs hēb
sūt addendēs 16 cū radicē de 10 que ē 1/6 & fere & cū radicē radicis d'
9/10 60 q̄s cēn 1/4 & erūt & amplū quod radix ē cēn 1/4 4 ut sūpī
fuerūnt . Cē sint cēhē radicē radicis d' 10 & 4 . cenāt̄is ra-
dicē radicis d' 9/10 60 & 16 & radicē 10 remanebūt 16 & radix de 10
minus radicē radicis d' 9/10 60 p̄sūma mīcātionis residui dicē cēnis
inse . Cū radix cōe ē residuū sūmi . cū radicē accipies 9/10 . adde 16
cū radicē de 10 & fit summa de 1/6 19 cetūs cēhē radicē radicis d'
9/10 60 remanebūt 1/6 4 q̄z radix q̄s cēn 1/4 & ē residuū q̄sūmi ut
vulgarē modū inuenīmus .

Cē sint adē radicē de 12 cū radicē radicis d' 10 & modū vulga
rē . s. scēdm q̄mq; vicēs radicē de 12 q̄s cēn 12/28 & cū radicē radi
cis d' 10 q̄s cēn 1/4 & adde & cēhē sūmā dicē mīcōis. Et si cenāt̄is
1/4 & 12/28 remanebit eīs residuū unius radicis d' 12 & cenādicē ra
dicē radicis d' 10 & cēhē scēdm artē hīs uīs sit a.b.c. radix de 12
& a.c. & b.c. radicēs radicis de 10 & accipiam̄ quadrāta portionū.
a.b. & 12 cū radicē d' 10 & accipiam̄ duplū superficiei a.b.c.

a.c. & q̄s radix

c. f. q̄ ē radix mdiaꝝ. d̄ 2 2 0 1 0 et h̄ alcb̄ ꝑ quadratū mitte nūc
aoīs 12 et mdicē de 10 et mdicē radicis de 2 2 0 1 0 q̄z iūcti nōiū
mdicē addūto quelibz. ¶ Et sūt mdicē radicis de 10 cū mdicē
q̄dricē d̄ 12 q̄ hēdicē mdicis de 2 2 0 1 0 et 12 cū dicē d̄ 10 q̄ h
tebit ꝑ p̄dcm quelibz relidūū 12 et mdicē de 10 mīn mdicē mdi
caꝝ de 2 2 0 1 0 vbi gr̄ filiū .1.r. mdicē de 12 .1.r. sit radix m
diaꝝ de 10 Q̄uerit q̄ nomina .12. relidūū. ¶ Iūct̄ .1.r. cū dū
sa mdicē sup̄ .12. erūt .2. duo quadrata h̄ntia .1.r. et .12. equalia 2
duplo relidūū .12. q̄ duplo 2 sūt .2. m.r. ¶ Et sūt quadrata ꝑ
mutū .1. r. et .12. silia q̄ 12 q̄ mdicē de 10 aut̄ dupla silia
ei .2. f. 1. f. silia q̄ radix mdiaꝝ de 2 2 0 1 0 remanēt 12 q̄ radix
10 mīn mdicē radicis d̄ 2 2 0 1 0 ꝑ quadratū relidūū .12. q̄ p̄dicta ꝯdē
ex addicōe q̄rūd radicū mdiaꝝ cū mdicib; radicū, q̄ꝝ pueniūt
radicēs cū nomiū. q̄ꝝ duoꝝ latꝝ rectāguli bnomii q̄ nūq̄ mēdu
les ꝑ ulla mūmubiles q̄drāta. nec ē eccp addēdo q̄ueūt mdicē cū no
miū. ut .m. p̄cedentiū q̄ngit. ¶ q̄libz ꝯpositū ex rōnali bin
dule ꝑmū nec ex mediis ea ꝛ se ꝑmeāt mdicē ex duob; bnomiis
ledēs. et q̄ ex ꝯpositū ex rōnali et bimediale ledēs. nec quadratū ex ē bnomiū
tertiū. sed ē ꝯpositū ex duab; mdicib; diuisis ꝛ rōnalē ꝑmū
q̄ueūt q̄drā cōpositū. ¶ ut hec ꝛgo demōstrāt mdicē mdiaꝝ de 12 ad
dāt cū radice mdiaꝝ de 10 q̄z quadratū filiū radicis de 12 radicē de 10
et q̄ duplo mlt̄ rōnalis unius mediū q̄ueūt radicē mdiaꝝ de 2 2 0 1 0 q̄ cū
nomiū mdicē. addūto quelibz ¶ Et radix mdiaꝝ d̄ 10 aut̄ mē
te mdicē mdiaꝝ de 12 remanēt nebulē mdicē ꝑ quadratū relidūū
radicis de 12 radicē de 10 cū mdicē duoꝝ q̄drāgulōꝝ q̄ꝝ unū q̄libz m
dicē de 8 radicē de 2 q̄ mdiaꝝ cū sint q̄ silia q̄ mdicē de 18
et q̄ duplo mlt̄ rōnalis mdiaꝝ radicē de 8 in mdicē mdiaꝝ 2 q̄ cū
q̄ hēnt mdicē de 18 et ꝑ q̄ sūt bnomiū ledēs ꝑ quadratū ē silis ad
icōis. et sūt mdicē mdiaꝝ duoꝝ q̄drāgulōꝝ mdiaꝝ de 8 q̄ remanēt rema
nebulē mdicē de 18 mīn 2 ꝑ quadratū relidūū. ¶ Et sūt cū mdicē mdi
aꝝ de 18 mīn mdicē mdiaꝝ de 2 2 cū mdicē mdi
aꝝ de 18 duct̄ ille ꝑ mdicē de 18 q̄ quadratū mīn cū
ri faciūt mdicē de 98 q̄ duplo mlt̄ rōnalis mdiaꝝ de 2 2
in mdicē mdiaꝝ de 18 ueūt mdicē de 96 q̄ ē ꝑ
mdicē de 98 mīn mdicē de 96 et ē aut̄ 18 q̄ mdicē
mdiaꝝ de 2 2 remanēt mdicē de 98 mīn mdicē de 96 ꝑ quadratū ē
relidūū. ¶ Et nota cū mlte mdicēs mdiaꝝ unū q̄ntū reducūtur
ad unā mdicē mdiaꝝ ut ē supꝝ ita ē octo mdiaꝝ de 10

ꝑ nōiū

ꝑ mīn mdicē mdiaꝝ d̄ 1 0 2 0 ꝑ ſi
mil ad dē mdicē mdiaꝝ d̄ 8.

Vault uoluīs ꝯnaꝑ pars q̄rta deduisi oē d̄ diuisiā ½ tū simꝑaū
diuidē nūm ꝓnūm ꝓdicē nl' radicē ꝓnūm seu nouī
radicē ꝓdicē diuidē quadratū diuidendi ꝑquadra
tū diuisoīs ⁊ sic deinceps q̄ta. Vbi gr̄ā uult diuidē 20 ꝓdicē de 10
q̄dratū diuidēdi .s. d' 900 diuid' ꝑ 10 ꝓuenit 90 quor radix ē id
q̄rend q̄drā diuisione. Et sint diuidē radicē de 10 ꝑ 20 diuide
10 ꝑ 900 erūt 90 unī uniꝰ c̄ radix ē id q̄sit. Et sint di
uidere radicē de 80 ꝑ radicē de 10, ꝓuenit q̄ hoc uult rōnāt
cū 10 ad 80 int, ꝓportionē sic quadratū uult ad q̄dratū nūm. Nā q̄
diuisione de 80 in 10 ueniūt 8 q̄ radix .s. 2 ē id q̄rit q̄dri
uisione. q̄ q̄ducta 2 in radicē de 10 radicē de 80 faciūt ne
cesse ē. Et sint diuidē eadē radicēs d' 10 ꝑ quatuor radicēs d' 11
rediget ipās radicēs ad radicē unī nūi .s. quadratū d' 10 .s. 100
mltā ꝑ 10 q̄drati de 1 .s. 16 mltā ꝑ 11 sic ueniēt radix de 1000
addiuidendū ꝓdicē d' 176 q̄ diuisione, ꝓuenit radicēs de 11/11 11
Et si .uū. radicēs 11 uult diuidē ꝓdictē radicēs 10 diuide 176 ꝑ 1000
⁊ ī omittere modū eundē oīs in hoc .s. 16 d' 176 .s. 11 diuid'
ꝑ 16 d' 1000 .s. ꝑ 176 erūt 11/176 q̄ radix ē id q̄sit.

De diuisiōe nūōꝝ et radicū ꝓdicēs radicū et eoꝝdē

Simil diuidē nūm nl' radicē radicēs ꝑ radicē radicēs. q̄dū q̄
drati rex. diuidēdus ꝑ q̄dātū ꝑdicti diuisor diuide et radix ra
dicis ei q̄ꝓuēit erit quesitū. Vbi gr̄ā uult diuidē 4 ꝓdicē ra
dicis de 10 .q̄dātū quadrati de 4 .s. 624 diuide ꝑ q̄dātū q̄drati radi
cis radicis de 10 .s. ꝑ. 10 erūt 2/624 q̄ radix radicis ē id q̄sit.
Et sint diuisus 10 ꝑ 624 erūt 2/4 q̄ radix radicis q̄drati, ꝓuenit q̄ diuisiōe
radicis radicis de 10 ī 4 Si sint diuidē radicē de 10 ꝓdicē
radicis 8 mltā radicē de 10 ī se, ꝓuenient 10 q̄ ī mltā ī se ē
100 q̄ radix radicis equatur radicēte 10. Ergo uult diuidē radicē
radicis de 100 ꝓdicē radicis de 8 q̄ diuidet 100 ꝑ 8 erūt 40
q̄ radix radicis, ꝓuenit q̄ diuisiōe q̄sita. Et sint diuidē radicē
radicis de 8 ꝓdicē de 10 diuide 8 ꝑ 100 erūt 10/40. cuius radix radicis
ē id q̄ꝓuenit q̄ꝑ diuisione. Deinde sint diuidē radicē ra
dicis d' 90 ꝓdicē radicis d' 10 diuide 90 ꝑ 10 erūt 9 q̄ ra
dix radicis .s. radix cū ꝓuenit q̄ꝑ diuisione. Si sint di
uidē radicē radicis 10 ꝓdicē radicis de 90 diuide 10 ꝑ 90 e
rūt 9 c̄ radix radicis .s. radicis de 1/2 ē q̄sit. Et adhuc si
uult diuidē radicē radicis de 1 1/2 ꝓdicē radicis cū diuide 1 1/2
ꝑ 2, ꝓuenit 81 q̄ radix radicis id ē 2 ē illud q̄ ꝓuenit q̄ꝑ diui
sione. Et si radix radicis cū diuidat ꝓdicē radicis

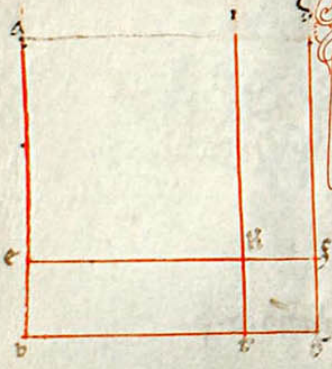
...domide 7 p 7 7 ...ebit 81 & radix ē 3 & ...ño ēndix ē 1/2 7 ...
...ter pmens q̄dā diuisiōē. & sit ē radicē radicel radicis d' 10 ...
...uis ...ēt p nūm. radicel radicis d' 11 redigel' hāc ad unā radicē ...
radicis s. mīca 10 inse ...tauit 100 q̄ inse mīcata fauit 1000 q̄ ...
mīcata p 10 fauit 100000 & radix radicis eīt ...ctē radicis ...
radicis ...e 10 similr p. nūm. radicis ...dicis d' 11 mīcā q̄dā ...
quadrati d' p s. 746 p 11 ueniente radice radicis d' 816 ...quo ...
...ad diuisel 100000 et pmentis nūm radice radicis eīt q̄sitū. & ...
...si q̄ ...dicis radicis d' 11 uel diuisē p ...ctē radicel radicis ad ...
10 ...nūdē 816 p 100000 et radix radicis ē q̄ppleīt eīt q̄sitū. & ...
...plicatis ...q̄ mīcatorū radicū ...ctorū atq; diuisiōis ...
...iōr simplicē uīcelicet ...r qui plures simplicel demotāt. ...
7 ...ostensis mīcatorū radicū trūi biomior ...se mīc ...si q̄si ...
...quīn ...scen binomiū mīcari ...ebāno ostendāt.

Radix q̄ ...si binomii ē q̄ppōta ...ndis lineis ...e ima ē radix ...
...si biomii et alia ē radix residui ...ēt binomii hīnūt ...ctē nomi, ...
...uer lineis p̄ma dī maior ...ēt minor ...quīcū ...r. s. radix ...
binomii quare ...stimil maior ...ē maior q̄ mal nomē q̄p ...
...ē nūl. ...radix quīn binomii ...pt similr sup nūm ...radicē ...
...minū nomē ...r mīc ē. unde ...pī uocāt ...mor et medīū potel ut ...
...dicā ē sup. ...et q̄ppōt ...radicē quīn binomii ...si ...ndicē ...
...pōr residor. ...radix ...uoq; ...ta binomii ...ctē modo q̄ppīt ...
radicē ...ti binomii ...quīn ...residor ...r. ...ūl ...ē ...ul alīq̄ ...pōr ...
...biomior ...dicē ...ebāno ...se addes quadrato ...tionū ...pī ...i du ...
...plo ...ūcauit ...ūl ...tionū ...nalia ...ut si ...ul ...inse ...mīcare radicēs ...
...et radicis ...e 6 ...ctē ...e p ...ūl radicē d' 6 ...ē remōstrēt ...
...lineā ...tiaq; lineā ...a. b. radix ...ē radicis ...e 6 ...ab. g. sit ...
...uis ...ē p ...mis radicē ...e 6 ...ualēt ...a. b. inse ...et p ...radix d' ...
6 ...si ...d. e. g. filiet d. e. sit p ...a. e. g. sit ...adix d' 6 ...ualēt ...
...dhuc ...b. g. ...si ueniente p ...ūl radicē ...e 6 sit ...g. e. ...f. p ...
...d. e. g. ...f. ē p ...ūl radicē ...e 6 ...ē ...ppotest non ...ilare ...
...gnotū ...ē ...ē ...ē ...ilatorū ...quadratū ...
...linee ...g. ...ducet ...d. f. ...f. ...si ē ...etā ...d. ...f. 8 ...ōmissa ...ī ...
...mo ...qualia ...si ...ūtā ...e. ...et duo ...equalia ...sup ...ūtā ...f. ...qualiano ...d. f. ...
...f. ...ū ...quadrato linee ...e. f. ...ēt ...a quisq; ...admedio linee ...
...d. ...f. ...quadrato linee ...d. e. ...q̄ s. p q̄ ...quadrat ...eles 16 ...ingo ...educ ...
...no ...f. ...f. ...quadrato linee ...f. e. ...ueniūt 16 ...ē quadrat ...
linee ...e. f. e. s. 6 ...ē ...eductū ...f. ...f. ...ē ...d. ueniūt 10 ...ē ho ...
...quinq; ...ūltatū ...ē ...q̄ ...aliquid ...nomiū ...mīcat ...insiū ...ranst ...

— nominis. Et quadrati minoris nominis alicui binomii

erpā mlcatione, prueniet illud residuū. quod ē mē quadratū maioris. Vt mox q̄ ducatur ꝑ radice de 6 ī ꝑ mīn radice de 6 ueniūt que sūt differentia que ē a. 16 m 6 erq̄ ē ductu quadrati linee a.b. ī quadratū linee .b.g. prueniūt 10 ē ductus .a.b. ī .b.g. ꝓpter quod medietas 10 dē ē duplo .a.b. ī .b.g. ꝓpter medietas radicis de ꝑ 0 et sic ꝓportio toti linee .a.g. hūs 8 radicis de ꝑ 0 que sūt binomii ꝗrti ei differentia q̄ē .a ꝑ 0 ī 6ꝑ nō sic equidistans nisi. Eodemq; modo ꝓcedetur in radicibus binomii ꝗnti seu. Vt si uoluerīs mīse mlcare radicē cū ꝑ pōt erradice de ꝑ 0 ꝙ 6 erradicē de cū ꝑ pōt erradice de ꝑ 0 mīn̄ que 6 quadratos sectionū insilīz addet̄ due radices de ꝑ 0 hec ē una radix 160 q̄ adde duplo mlcatōis unī quadrati inalterum equaliter mlcati ꝓueniūt 16 q̄ radix ē ꝑ 6 ad quorum latus ex sex habes radicē 160 ꝑ ꝑ Item mīse mlcare radicē cū ꝑ pōt erradice de ꝑ 0 quadrate de 14 radicē residui quod ē mīe radicē de ꝑ 0 mīn̄ 14 mlca unū quorūlibet sectionū mīse ex prueniet radix de ꝑ 0 cū radice de 14 q̄ ē radix de ꝑ 0 mīn̄ radice de 14 q̄ mīse addē radicē de 160 mlca radicē de ꝑ 0 cū 14 ī radicē de ꝑ 0 mīn̄ 14 ꝑ 24 q̄ ē a 14 ī ꝑ 0 q̄ radicē que ē 4 duplicata ueniēt 10 q̄ adde cū radicē d' 160 prueniet radix de 160 ꝑ 10 que nō facit binomiū quia

Residuis sunt mlcare radicē cū ꝑ pōt erradice d' ꝑ 0 ꝙ 4 erradicē de ꝑ pōt erq̄ē nōnī s. ꝑ 0 mīn̄ 4 mlca simile multiplicatiq; sectionē mīse ueniet radix de ꝑ 0 et 4 erradicē d' ꝑ 0 mīn̄ 4 quibz minuī cū uīcus fiat radix de 160 erq̄ mlcatione quadrati unī sectōis fiat alia ꝓportionalis 14 q̄ radix duplicata facit radicē d' 60 ꝙ sic ꝛeb nota binomii septimi que sūt radix de 160 radix de 60 Similiter ſ. ꝑ pōt̄ erradice de ꝑ 0 de 18. et erradice de 18 ꝙ radicē de cū ꝑ pōt erradice de ꝑ 0 mīn̄ radice de 18 prueniet q̄ ex multatione nota binomii septimi q̄ maioris nōis ē radix ſ. duplicis ꝑ 0 ſ. 160 ꝙ mīn̄ nomē ē radix quadrupli residui q̄ē mīe 18 ꝙ ꝑ 0 ſ. q̄ 88 et ita cōtingit ex omnibz radicibz quinte ꝛeiecte binomii. Sī notandū ꝙ ductus erradicibz ꝓme binomii ere radicē radicis mīi cū ut sic cū ꝑ pōt̄ radicē de ꝑ ꝙ radicē 7 cū radice de ꝑ mīn̄ radice de 7 prueniet quinq; octo q̄ addite quadratis sectionū ꝙ duplo mlcatōis unī quadrati alterī prueniūt 6 Sī ex eo ductus ex radicibz ꝓme binomii ꝙ sui residui ē radix de 1ꝑ q̄ ꝛeiecta ostendit insigne utq; de ꝛeiecta binomii diximus clarius in tractatu ſpeculi q̄ dicitur equi angli equicrurii. a. b. sic ꝑ radix de 7 ꝛectigonii. g. c. sic ꝑ mīn̄ radicē de 7 ꝙ ꝛeiecta ꝛecta.



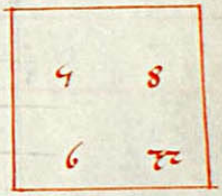
— ſ. radix quadrupli q̄drati residui q̄ est a quadrato de ꝑ. iii. 7.

.a.e. impñcta ꝫ sit recta .e.b. equalis recte .k.t. sit recta
a.f. ꝙducas usq; m̄ d. erit recta .f.d. equalis recte .g.k. tꝛ
plenē .b.t. ꝫ .g.d. & tetigonū ē quadrilaterꝫ .a.b.g.d. cui ē lat⁹ s.
radix ipi linee .b.g. que ē q̄rtio lineaꝝ .b.t. ꝫ .t.g. sz .b.t. ē
radix trigoni .a.k. cui sit equalis linea .e.k. & .t.g. ē radix
tetigoni .g.t. ꝫ ꝙducta .h.t. hoc ē .g.t ī .t.b. ꝙcit superficiē .b.
k. ꝫ ꝙducta .k.g. ī .k.h. ꝫ hoc ē .g.t. ī .t.b. ꝙcit superficiē .k.d.
ergo ꝙquadratꝫ lineaꝝ .b.t. ꝫ .t.g. ꝫ ꝙduplo .g.t. ī .t.b. ꝙcit
tetigonū .a.b.g.d. sit ergo spacia tetigoni .a.k. ꝫ k. 8 ꝙquoli
bet spatioꝝ .b.k. ꝫ k.d. ē 7 & spacii tetigoni b.d. ē 14 spa
dix ē linea .b.g. que ē cōpōita ex radice binomii p̄mi .s. ex .b.
t. ex .t.g. radice recti ipi q̄ ē .t.g. ꝙ oportebat ostendere. Si
milr eod⁹modo ostendetur q̄ linee ex radicaꝝ binomii sedi recti ꝫ ex
ex recta rectis ex sēp radicē radicat⁹ mū hys tm̄ exponat⁹ exhibendꝫ
milcare. ꝙpōita ex mūis ex radicaꝝ radicē mediū inexplē.

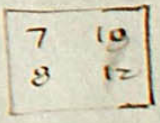
Sumat milcare 1 radicē de 7 p 4 radicē de 10 pdē mūm sim
mūo radicat⁹ q̄dm sub quadrato radicat⁹ ut in margine cernit
ꝫ milca 1 per 4 .s. mūm ꝓmūm ꝫ radicē p̄dictē .s. 7 p 10 erūt
10 ꝫ radix de 160 ꝫ milca ex diuiso 1 p̄dictē de 10 ꝫ per 4 p̄m
dictē de 7 exibit quatuor radicat⁹ d 10 ꝫ addp radicat⁹ d 7 hꝫ ē
radix de 7 10 ꝫ radix de 174 ꝫ ꝙ hūtur ꝓ questiõ milcare 10 radix
d 7 10 ꝫ radix de 174 Et q̄z nō cōicāt⁹ quadratꝫ radicū sup̄ sup̄ad
ī ꝓportione quadratoꝝ nō potuit reddi impossibilꝫ nōiꝫ sicut
facem⁹ in hac alia milcare in qua uolum⁹ milcare 4 ꝫ radicē d 8
ī 6 et radicē de 72 q̄ 8 ꝫ 72 ī mūos sicut quadratus mūs ad
ratū mūm. id ē diuide 72 p 8 ueniet 9 cui radicat⁹ de 8
ē una radix de 72 Ergo mūs milcare 4 ꝫ mūi radicē d 8
p 6 ꝫ duas radicat⁹ de 8 milcab⁹ ergo 4 p 6 ꝫ mūi radicē p̄dictē
et 72 et diuo quadrati radicat⁹ d 8 .s. 16 q̄rta ꝓb cū milcatiōs 8
p 72 et ꝓsima accepti radicē. adde q̄ 72 cū 16 et 96 ꝫ milca 4 p
diuis radicat⁹ d 8 ꝫ 6 p̄mi radicend⁹ 8 ꝙdrieris ꝙsimi diuis
milcatōiꝫ sequēti radicat⁹ de 8 quibꝫ additis cū 96 et 96 ꝫ mūa
radix de 10 8 p ꝓsima quesite milcatōis.

Sumat⁹ milcare 7 radicē radicat⁹ de 10 p 8 radicē radicat⁹ de
12 milcand⁹ sīliter 7 p 8 radicē radicat⁹ de 10 p radicē ra
dicat⁹ 12 ꝫ 7 p radicē radicat⁹ d 12 ueniēt itꝫ 49 ꝫ octo ra
dicat⁹ radicat⁹ d 10 ꝫ 64 radicat⁹ d 12 ꝫ mūa radix radicat⁹ d 10
ꝫ nō potuit dicta impossibilitas nōiꝫ cū ꝓpōd⁹ 10 ad 12 ut sit sic
quadratus mūs adequatꝫ mūm. nec erit sic medius mūm ꝙ

et radix d 160.

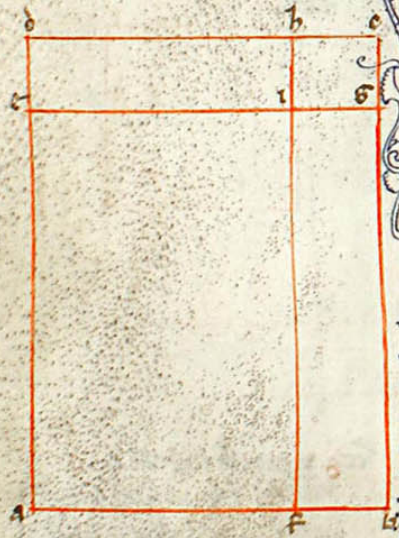


milcat 1



et 8 p radicē radicat⁹ d 10.

nentes. VII simus mistare 8 radices radices radicat ãi p. 9
radices radicat de 77 mista 8 p 9 cum radices radicat d' 77
cum mista prudices radicat trui cum radices radicat cũ mista p radices
radicat d' 77 nenient 77 et 8 radices radicat d' 77 monte radi
ces radicat d' 7 cum radix radicat d' 81 f. 7 ffy 7 addatur
cũ 77 simile 74 et hinc cũ radice radicat d' 1968 7 prima que
sit mistationis. Et sit cui nomen radicat radicis cũ una radix
radicat de. 1968 7 et octo radicat radicat d' 77 f una radix ra
dicat d' 110492 q due radicat radicat nõ possint aggregari in radice
una binomi sed. Q. una cum addicta quadrato ipius p ducto radix
de 7777 87 ter duplo mistationis una mista ducenti 4 72 et hinc
una radix et addito p ceptor. et sic hinc, p ducentã mistam integr 74
et una radix cum radice de 7772487 et ter 7 ffit sic
Ita si una mista radicis de 4 cum radice radicat de 10 p radicis d'
6 cum radices radicat 12 mista spes ordinis tio cuius radices d' 20 et
radices radicat d' 760 cum radices radicat de 700 cum radices radicat d' 170
Rursus simus mistam 7 mm radicum 4 p 6 mm radicem de 20 mi'
am 7 p 6 et 18 d' quibus tolle mistationem de 7 in radices de 20 d 6
in radices de 4 remanebunt 18 mm duabus radicum d' 180 simp' q add
mistationem radicat de 4 cum radices de 20 et 78 mm radicem de 720
p ducta mistam. Et notandum q cui mistam aliq' diminutam p dimi
nutum tic illa mistatio c' sit. et c' mistam addita mi' sectam. et cui
cor mistam et augendi h cui mistam addita p diminuta et cor mista
cio et minuenda ut insequitur ostendet. Et q. cui hac mistam p
ducit nisi tm mis radicem sub q nõa suppositor regulor sint ad in
uicem p ducta alia. Vbi gm 5 erit 6 duplae. 7 hoc modo radix
d' 20 et dupla radicem d' 4 Ut sic 7 sint addita radicem d' 4 cum 6 ad
radicem de 20 cui p ducto notificant et q dat cui nõm. hoc et sic q'd
7 et ad. 4 cui q' d' de 6 et ad 20 - Et ut ostendat quisitam rectam
minuendi et esse dat sit. a d a cuius q' dor latus. a. b. c. d. recti anguli
tantumdem q' uis pars. ex. ad d. c. ex. a. b. sint. d. e. et b. f. p ducta
tm. e. p producatur linea. e. g. equi distans utri p imeq. a. b. et d. c.
sibi p ducti. f. p producatur linea. f. h. equi distans lineis. a d. et
b. c. Et ducti q' d. a. in. a. b. p ducti sit superficies a. d. et ductum h. f.
in f. g. sit. d. e. in f. b. p ducti superficies. g. h. Et q' duabus superfi
cibus similibus duo superficies q' f. b. h. et g. d. sit una p ducti ex. f.
b. in. b. c. hoc est ex. d. a. in f. b. alia p ducti ex. a. g. in. e. d. hoc
ex. a. b. in. e. d. remanebunt superficies. f. e. q' p ducti ex. e. a. in. f.
q' oppositebat ostendo. Et sic in mistis hiatus sit ducti. a d. 6 d' tan

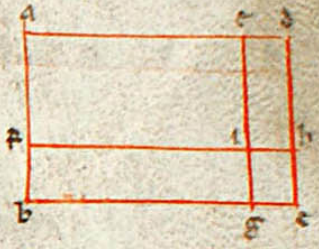


ferunt̄ d. e. que sit radix de 10 et a b sit 7 i b f sit radix
de 4 ducto m'care 6 min̄ radices de 10 p 7 min̄ radice de 4 fit e.
e a i. ē. a f de q̄ fuerit sit facta f e. m'cato ut q̄ d a i. a b et
18 p̄fficiet a b c d. quibz addā m'cationē radicis de 10 in
radice de 4 s. q̄ d e. diminuta in b f. diminuti hoc e h a.
i. i g. d qua fuerit subtracta g h et 8 p quā tande subtracta b d.
i g h. d quibz auferā m'catā. q̄ d e. i f b. hoc e q̄ h f. i f
b s. subtracta b h. q̄ fuerit q 6 ducis in radice de 4 remanebūt
18 min̄ sex radicibz 4 p̄dictis subtractis g d. i f e. d quibz sum
ptis m'cationē 7 in radice 10 s g e. i e d. d qua m'catē p
fuerit subtracta g d. remanebūt 18 minus quatuor radicibz de 4
ēdz radicibz de 10 p̄fficiēs f e. ut sup̄ius inuenim̄. Ita sex radi
ces de 4 et res radices de 10 sunt una radix de. 7 10

Ite sum̄ m'care 4 min̄ radice radicis duor p. 4 min̄ radice ra
dicis de 8 m'cabi sicut 4 p 4. et radicē radicis binarii p̄
dicē radicis de 8 et 12 addita d q̄bz tolle ea q̄ fuerunt ex ducis
4 in radice radicis 8 res 4 in radicē radicis 12 remanebūt 12 min̄ q̄
tuor radicibz radicis de 8 et q̄libz radicibz radicē 12 p̄ducta m'ca
Adhuc sum̄ m'care radicē de 8 min̄ radice radicis duor (nec)
p̄dictē de 18 min̄ radice radicis de 128. ex ducta quidē ra
dice de 8 in radicē de 18 p̄fficiūt 12 addita ex ducta radice ra
dicis duor in radice radicis de 128 p̄fficiūt 96. addita ex duc
ta radice de 8 in radicē radicis de 128 p̄fficiūt una radix radi
cis diminuta de 8 19 et ex ducta radice de 18 addita in radicē
q̄ radicis diminutā de 72 p̄fficiūt una radix radicis diminuta
de 648. sic ig̃r̄ p quesita m'catē 16 min̄ radice radicis 819
in radice radicis de. 648

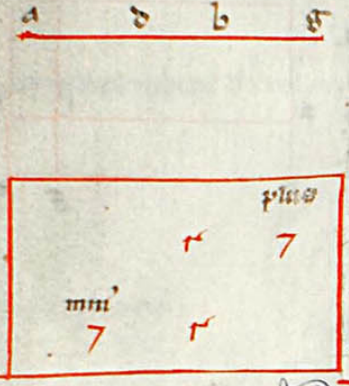
Similr sum̄ m'care radicē radicis de 10 min̄ radice radicis de 10
p̄dictē radicē radicis de 20 min̄ radice radicis de 14 sed̄ mod
o recepta sum̄a ip̄i m'catoris ē radicē radicis de 600 et
radicē radicis de 140 diminuta duabz radicibz radicis de 200. ex
q̄ radices radicis de 600 de 140 fit p̄cepta cū coīcatis. reb̄ p
fuit congregari in radicē binomii cui ip̄e ē aggregatē. p̄fficit radix et
radicis de 1240 et radicis de 1200. hic oīa explicant̄ ex emi m'ca
re binomiales nūos p̄ceptos.

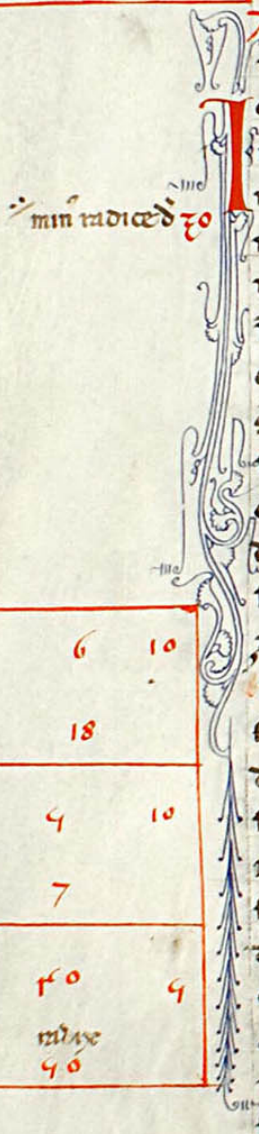
Cum uolu'is m'care aliq̄ binomiū p̄sum̄ recisū ēe quadratū
minoris nois de quadrato maioris et q̄ remanēs fit ē sum̄a d̄ste
m'catoris. ad ē rei euidētia. adiacet binomiū. a c b. g. ē maī nomī
sit. a b. a quo auferat ēdē nois. b. g. sit q̄. b d. Patet g ē d. a.



quod uolo mlcare ꝓ iomm̃ .a.g. & ꝓlinea .d.g. diuisa ē in duo equalia ſ ꝓcm̃ .b. rc̃ indirecto. adiūcta ē linea .d.a. erit mlcato .a.d. m. a g. cū quadrato linee .d.b. equalis ipſi linee .a.b. & ſi quadꝝ noīs .a.b. autem quadꝝ noīs .b.d. hoc ē noīs .b.g. remanebit ſiīa mlcatois. ꝙ ad .i. a.g. q̃ opꝓtebat oſtendere. & ut ſi m̃ius oſtenderetur ſit .a.b. 4 rb.g. ſic radix 7 quolo mlcare ꝓ 4 mis radicē 7 ſi ꝓ .a.d. auferā tm̃ quadratū linee .d.b. ſilicet 7 equadratū linee .a.b. ſilicet ex 16 remanebit 9 ꝓſima mlcatois .a.g. ℞ vt ſupra dixi ſi fuerit unꝰ pē 4 radicē d 7 4 mis radicē d 7 ū in margine erit mlcatū 4 que ſunt inuicē ꝓportionē nom binomii .ſ. ꝓ 4 & ꝓdicē te 7 est 16 equalior radicē te 7 addita mlcata radicē d 7 diminuta ꝓtē noīs binomii ꝓpinquior 7 diminuta equalior radicē d 7 ſimili diminutis. quiꝝ exit ex 16 equalior mlcato 7 .ſ. exiſtens remanebit 9 ꝓſima ſite mlcatois.

Rc̃ ſimꝰ mlcare tertiū binomii ul' ſexti in ſuū reciſū ſiſ ex ex mlcatē ꝓpinquē miſ rationi. ut ſi uolueris mlcare radicē d 40 ex radicē te 20 ꝓdicē te 40 extrahes quadratū maioris noīs ſ. binomii .ſ. 20 te 40 remanet 10 ꝓſima ſite mlcatois. ſic operandū in mlcatē ſedi equalis binomii recte reciſi. & notandū q̃ ſuto exemplari one alicui radicis in alq̃ binomii ꝓpinquē miſ tm̃ tūc noīa reſidui ꝙportionalia cū noīb̃ binomii exhibit adiūcte eundē ordinē. ut ſimꝰ mlcare 6 radicē te 10 ꝓ 18 mis radicē te 90 q̃ noīa reſidui ſiſ tripla ex noīb̃ binomii ac ꝓpinquis differentie que ē inter quadratū maioris noīs binomii & quadratū mioris & q̃ ꝓuenit eſſe .i. ſic ubi gratia exiſtis 10 d 4 6 remanet 4 6 quiꝝ tripli exis reddit 78 ꝓſima mlcatois. q̃ ſi ualet ſicut ꝓpinquis ſedi mod' mis q̃ mlcatus 18 in 6 radicē te 10 ꝓducit 108 rc̃te octo radicē d 10 d quiꝝ ſimilis mlcato radicis te 90 in 6 in radicē te 10 remanebit 78 ut ꝓ dictum. exēplū modo ꝓcedendi in mlcatē binomioꝝ rectis ſoꝝ diuiſoꝝ. ut ſimꝰ mlcare 4 radicē te 10 ꝓ 7 mis radicē te 40. ſi alias ſiquidē 7 ꝓ 4 radicē te 10 ueniūt 4 radicē te 490 quiꝝ ſimilis ſexti mlcato radicis te 40 in 4 in radicē te 10 remanebit 4 radicē d 490 diminuta radicē te 7 40 d 40 ſcilicet nō ꝓt dici in ſimilibus. cū radices ꝓpinquē nō ſe cōtingāt. ℞ & ſimꝰ mlcare radicē d 40 addita 4 ꝓ radicē te 40 diminuit 6 mlcata quinte radicē d 40 in radicē d 40 in 4 ꝓducit radicē te 2000 radicē d 1240 quiꝝ ſimilis ſexti mlcato te 6 in radicē d 40 in 4 remanebit radicē te 2000 & radicē te 1240 mis 40 & radicē te 1440





Si uis multare aliquē numē radicē radicis p̄sim̄ resilī oportebit ut diuidas imultatē binomii ī suū resilī. Et si uis multare p radicē radicis 10 p̄ p̄ minꝰ radice radicis de 10 ꝑ trinomiū quadratū nois mōis .s. radicē de 10 de quadrato maioris .s. de 16 remanebit 16 minꝰ radice de 10, p̄fata multatē. Et similiter si radicē radicis de 10 ī duplū sui resilī .s. in 8 minꝰ radice radicis de 160, per ea uero quę duplāte multatōi .s. 32 minꝰ radice de 40

Si uis multare radicē de 10 radicē radicis de 10 p̄sim̄ resilī .s. radicē de 10 minꝰ radice radicis de 10 ꝑ trinomiū quadratū minoris nois de quadrato maioris remanebit 10 minꝰ radice de 10

Si uis multare radicē radicis de 60 radicē radicis de 14 p̄sim̄ resilī .s. radicē radicis de 60 minꝰ radicē radicis de 14 ꝑ binomiū quadratū minoris nois de quadrato maioris .s. radicē de 14 et radice de 60 remanebit minꝰ radice de 14, p̄fata multatōe. Et si uis multare p radicē radicis de 10 ī 4 minꝰ radice radicis de 12 sicut ea ue hic ponit. Et multatio ordinē hō maiꝰ nomē resilī puta nomē binomii .s. p̄ p̄ radicē radicis de 10 et 10 radicē radicis de 10 quinq; radices radicis de 10 quinq; ęthe multatōnē diminue radicē radicis de 12 ī 4 radicē radicis de 10 remanebit 10 radicē radicis de 10 diminutis quattuor radicibꝰ radicis de 12 et una radice radicis de 10 et sicut facies in similibꝰ et sic occurrit nobis ęquatio. Et dimissis .x. addatis reddigest ea ī pristinū nois. Et si uis multare p radicē radicis de 27 p 4 minꝰ radice radicis de 3 ꝑ simile quidē ęquę multatione 10 et radicē radicis de 27 diminutis .x. sicut radicibꝰ radicis de 12 et una radice radicis de 108

diuidere 20 radicem de 96 producet 8 diuiso utroq; noie figu
re producet 8 ,pueit radicem de 40 radix 17 Similiter di
uisis 20 min radicem 96 producet 8 ,pueit radix 40 min
radicem 17 .Et sicut noia diuidere uoluit producet radicis
10 miscet 20 ise,pueniet 160 quibus mise miscet fiunt
160000 quibus diuisis p 10 fiunt 16000 q; radix radicis 8 unu ex
noib; uenientib; exdiuisis. Et sicut modo diuiseris radicem
de 96 producet radicis de 10 .s. quotiens 96 p 10 exibit radix
radicis de 9 1/2, preq; noie ueniente exdiuisione. similiter di
uisis 20 min radicem de 96 producet radicis de 10 ,pueit radix
16000 min radice radicis de 9 1/2 Et sic fiunt diuidere radicem
80 radicem 18 p diuiso utiq; noie p 1 .s. 80 p 18 p 16
,pueit radix de 4 et radix de 2 radix de 80 min radix 18
diuidatur p 1 ueniet radix 4 min radice tu. Rursus simili
ter de 80 radicem de 18 diuidere uis producet 8 ,pueit radix
10 et radix de 6 Et sic radicem de 80 min radicem de 18 producet
de 8 diuisis ueniet utiq; radix de 10 min radicem de 6 Simili
ter q; noia diuidere uis producet radicis alie nili sed ea quod se
quitur apparet, De diuisione nilos p radicem sui radicem radicis p binomia p
Cum uis diuidere aliq; nilm p radicem nili seu radicem radicis nili recisa
p aliq; binomii mixti ipm binomii ei sui recisi q; pueit ei
nis ut ostensu e. in quo diuisione mixtione diuidendi nili
recisi diuidentis binomii habeb quesitu. Vbi gra. sit .a. nilo
p radix nili seu radix radicis numi q diuidere uis p binomii .b.g.d.
q; noiu sit maior .b.g. ,pueniat expi diuisor q; tuor .g. ra
dicem .e.g. equale noi .g.d. Recisi g e .b.e. q; mixto p nilo
nili .b.d. p pueit nili .f. q; radicem .e.b.e.in.b.d, pue
niat residuu q; me quadratu noi .g.e. et quotiens noi .d.g.
ut supius demostratu e. Cuius diuidatur nili .f.p. binomii .b.d.
pueiet utiq; recisi .b.e. Et si diuidas q; uis multiplex ei; de
nis pars .s. liber pars nili .f. p binomii .b.d, pueiet utiq; ex di
uisione id multiplex ei; dem pars recisi .b.e. si g ejus e nilo .a. nilo
f. equal e q; tuor .g. recisa .b.e. similiter maior minor mixto
p; dualr g 1/2 sic .f. p; .d. .a. sed ita .b.e. ad .g. q; tu. Et
mixtio sedi situu .f.a. t .b.e. ejus mixtioi p; q; tu. Et di
uisa mixtione .e.a. t .b.e. p nilm .f, pueit .g. illud q; pue
nit ex .a. diuiso t binomii .b.d. g oppotebat ostendere. Quod si .a.
diuidere uis precisi .b.e, t ueiet q; ex mixtione .a. t binomii .b.d.
diuisa p nilm .f. pueniet q; tu sidiuidat nili .f. p recisi .b.e.

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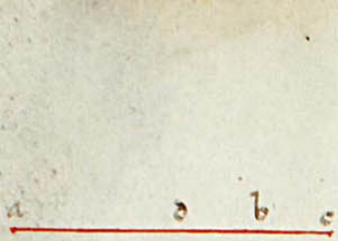
pueniet unq; binomiū .b.d. rem. sic. E. ad. a. ra binomiū .b.d.
addd q; pueit ex .a. diuisio irrecisa .b.e. Et ut hꝫ iniūs habeat sic
a. 100 q; diuidē uns ꝑ binomiū .b.d. & nom silicet .b.g. sic ꝑ min
ambe ic silicet .g.d. sic radixd 7 .Qr recisiū .b.e. & ꝑ minꝰ radica
d 7 quo mlato ꝑ ꝑ ꝑ radicē 7 .s. ꝑ binomiū .b.d. ꝓueniūt
9 primo .f. cui⁹ sidiuidat 9 ꝑ ꝑ radicede 7 ꝓuenient ex
ipa diuisione ꝑ minꝰ radicede 7 .s. recisiū .b.e. & hꝫ sic 9 ad 100
ra ꝑ minꝰ radicesd 7 addcitū .Qr mlcandꝫ 100 ꝑ ꝑ minꝰ ra
dicesd 7 diuidendi ꝑ 9 exq; em mlcatꝰ ꝓueniūt ꝑ 00 minꝰ cētū
radicatꝫ de 7 q; diuisꝫ ꝑ 9 ueniūt 1/9 ꝑ ꝑ minꝰ. ꝙ. radicatꝫ
nonad 7 Qr si 100 diuiseris ꝑ ꝑ minꝰ radicesd 7 ueniet
cisdē dispōit 11/9 ꝑ minꝰ radicesd .xi. nonad 7 ꝓquisita di
uisioē ꝑ sūt nouā exēplis sūme ꝙpōitā ut nobis diuisoris ꝙlic
ꝑ sint adūna radicē de 7 ra 11/9 ꝑ adunatī radicesd et nouade 7
rē siradicē de 80 diuidē uns ꝑ radicēd 8 radicēd 6 mlta
radicē de 8 radicēd 6 ꝑ sūt recisiū .s. ꝑ radicēd 8 minꝰ
radicede 6 exibit 7 In quibꝫ diuide mlcandꝫ radicatꝫ 80 ꝑ ra
dicēd 8 minꝰ radicede 6 i. medietatē radicatꝫ de 80 .s. radica
d 40 mlta in radicesd 8 minꝰ radicede 6 exibit radixd 160
minꝰ radicesd 120 Et si radicē de 80 diuiseris ꝑ radicēd 8 mi
nus radicede 6 ꝓuenit unq; radixd 160 radixd 120
Rursꝰ siradicē radicat ducentox uns diuidē ꝑ ꝑ binomiū.
Aut ꝑ 7 radicē duox mlcati 7 radicē de 7 ꝑ 7 minꝰ radi
cede 7 ꝓuenient 7 Qr sidiuidat 7 ꝑ 7 eradicende 7 ꝓue
nient unq; 7 minꝰ radice duox 7 quo reciso sup̄ dicis dispōis
mlta radicē radicat ducentox ꝓuenit radix radicatꝫ 16200 minꝰ
radice radicat octingentox quibꝫ diuisis ꝑ 7 ueniēt radix radi
catꝫ 7/7777 6 minꝰ radice radicat 800/7101 Et si diuidat ra
dix radicat ducentox ꝑ 7 minꝰ radice duox mlcandi cui⁹ ipōis ra
dicat ꝑ 7 radicē de 7 rei ꝙ prueniūt diuisis ꝑ 7 ex
bit radix radicatꝫ 7/7777 6 radix radicatꝫ 800/7101 rsitu Q; diuisoē nūox 7 radicāt l' radicāt ꝑ ꝑ
dicat facē similiter Cōpitol ex nūo et radice radicat uel ex radice
et radice radicat seu ex duabus radicabus radicabus radi
cum diuersis
Sins diuide 10 ꝑ 7 radicē radicat cū scias ꝑmū q; cū mlcatꝰ
minꝰ radix radicat 7 sūt recisi cui⁹ ꝓueit ex ipōi mlcandi id ꝑ
me quadratū minoꝫ nois 7 q; dat maiorē q; residuū ē aut
minꝰ minꝰ radice aut radix minꝰ nūo. q; ꝓueit ex mlcandi ra
dicat 7 radicat radicat 7 sūt residuū. Et cū mlcandꝰ due radices



radicis diuise p̄ssim̄ residū huic radici m̄ in̄ radicē t̄ radicē tm̄ p
uenire demōstrato. Sit itaq; a.c. oppōm̄ ex mīo. & radice radi
cis huic maī nom̄ a.b. iacente b.d. cuius noī b.c. & q̄. d.c. linea
diuisa & rudio equalia sīt p̄ctu. b. rei. ad mēta & lieī. a.d. eīt
m̄ltūo. a.d. ī. a.c. cū quadrato lineē. d.b. eīsd̄ q̄drato linee. a.
b. q̄r si auferat̄ quadratū linee. b.d. ex quadrato linee. a.b. rem
anebit m̄ltūo ex. a.d. ī. a.c. Sit g̣ p̄mū. a.b. nūs. & b.c. hoc
est b.d. sit radix radicis nūi remanebit g. a.d. d. cōpōm̄ ex nūo.
a.b. in̄ radice radicis. b.d. & q̄ m̄ltūo. a.d. ī. a.c. p̄uenit q̄d̄
nūs. a. b. in̄ quadrato radicis radicis. b.d. er g̣ quadrate nūi.
a.b. nūs. quadrati radicis. radicis. b.d. & radix nūi. g. ex duct
a.c. in. a.d. p̄uenit nūs de in̄ radice. Et si maī nom̄. a.b. sit
radix radicis nūi. & in̄. silicet. b.c. sit nūs, p̄uenit ex. a.b. ī se
radix nūi. Et ex. b.d. in se p̄uenit nūs. g. ex. a.c. ī. a.d. p̄ue
radix nūi minus nīo ut p̄dixi. Sili ostendet̄ me, p̄uenire simili
ex nōīs. a.b. & b.c. sit radix nūi & alter sit radix radicis. Si
similiter q̄ nom̄ fuit radix radicis nūi huic ex. a.b. ī se, p̄uenit radix
nūi & ex. d.b. silr. Et id q̄ p̄uenit ex. a.c. ī. a.d. silicet ex duab⁹
radicib⁹ radicis diuisis infinitis suis residū, p̄uenit radix nūi mi
nus radice. Q̄ similiter colligentes possūt reddigi ad radicē una
ut p̄dixi. Et q̄ uis diuidē 10 ī & radicē radicis trū mlta
ex radicem residuum. scz & in̄ radice radicis trū, p̄uenit in̄
radice trū que sidiuidit p & radicē radicis trū. reddunt
unitas sua residuum. scz & in̄ radice radicis trū, proportionalit &
sic p in̄ radice trū ad 10 ita & in̄ radice radicis trū ad
quesitū. Et si diuidat 10 p & in̄ radice radicis trū diuidēdo p
p in̄ radice trū. ut diuidi sit 10 p p in̄ radice trū & q̄ pue
nēt mltā p & in̄ radice radicis trū. Et q̄liter 10 diuidit
p p in̄ radice distensim & supi. dic q̄ p̄uenit ex p̄ diuisi
de $\frac{10}{1\text{ p}}$ & radicē de $\frac{\text{p}200}{1\text{ p}}$ q̄ mltā p & in̄ radice radicis
trū reddit ea que p̄uenit ex 10 diuisi ī & radicē radicis
trū. Et si 10 p & in̄ radice radicis trū diuidē uis mltā p
sēptas $\frac{\text{p}0}{1\text{ p}}$ radicē de $\frac{\text{p}200}{1\text{ p}}$ p & radicē radicis trū & habeb⁹ q̄d
de sius diuidē 10 p radicē de & radicē radicis duar mltā radi
cē de & radicē radicis duar p̄dictar de & in̄ radice radicis
duar & p̄uenit in̄ radice de ex 10 diuisi ī & q̄ p̄uenit
mltā p radicē de & in̄ radice radicis duar & habit p̄dictū. Et
si uoluis diuidē 10 p radicē de & in̄ radice radicis duar ex
p̄uenit ex 10 diuisi ī & in̄ radice duar. mltā p radicē de & ex

Rpradicē radicis duox cū hab ꝓpōnē.
Rursus sint diuidē radicē de 120 pradicē radicis de 18 radicē
radicis 8 pradicē radicis de 18 minꝰ radice radicis de 8 ꝙ pueniet
binomiale cuius nomina ꝙrū radix due. ꝙ una diuidē radicē de 120 ꝙ
ueniet radicis de 60 ꝙ mihi pradicē radicis de 18 minꝰ radicē radi
cis de 8 cū hab ꝓpōnē. Si ex siradicē de 120 pradicē radicis de
18 minꝰ radicē radicis de 8 diuidē radicē de 60 ꝙ
ius ꝓueniet pradicē radicis 18 minꝰ radicē radicis de 8
cū hab sint diuidere radicē radicis de 4000 radicē radicis de 40
radicē radicis de 20 mihi hoc binomiū ꝓ insuū radicis de
radicis de 40 minꝰ radicē radicis de 20 ꝙ pueniet radicis de 40 ꝙ
minꝰ radicē de 20 ꝙ sit diuidē radicē de radicis de 4000 hoc ē mihi
dicē de 40 minꝰ radicē de 20 cū hab binomiū. Si radicis de 40
minus radicē de 20 pueniet 20 cū hab diuidē radicē radicis de 4000 ꝙ
ueniet radicis radicis de 5 ꝙ mihi pradicē de 40 minꝰ pradicē de
20 ꝙ ꝙ pueniet mihi pradicē radicis de 40 minꝰ radicis de
20 cū hab ꝓpōnē.

Et sint diuidē aliq simplex cū binomiū sui residui ꝙ ha
ū ē unū ex tribꝰ quox ꝙ ꝓmittit ꝓ
nōiū mihi ꝙ diuidat pueniet diuidens nōiū
residuū binomiū cū hab ꝙ quere. Nam ē ꝓbm ex tribꝰ u
nū nomē residuū mihi ꝙ ꝓpōnē binomiū ꝙ ꝓpōnē pueniet
ē aut residuū binomiū sine radix unius nominis ꝙ diuidatur
lineā. Sit ista lineā. a d. trinomiū alie nomē sint a b. b c. c d. ꝙ
quarum a c. binomio recta e c. e. quadrat recte c d. Et quia re
cta e d. diuisa ē in duo ea sic puncta c. ꝙ rectangulum ad duas ē
lineas e a. eā mihi a d. i. a d. ꝙ quadratum lineē e c. ea
quadratis lineē a c. Quā cū unus mihi aree residuū a c. i. nōiū a d.
mihi a d. ē binomiū a c. unde ꝙ ꝓpōnē mihi ꝙ binomiū ē ꝓdt nōis.
e c. hoc ē nōis c d. ꝙ remanebit id ꝙ fit ex ductu a d. i. e a
mihi aut qm ex ductu a c. binomio i se pueniet ꝓmū binomiū nomē
sui ē. Ex hoc ē binomiū cū mihi aree i se pueniet ꝓmū binomiū. ꝓmū
aut binomiū nūc ē a d. Sam ꝙ quos ex ductu e c. i se ꝓ
ueniet nūs. qm nec ē ꝓmo binomio nūm qm ē nūs radix nūi. Si
aut nūs qui minuendꝰ minor nūo qui ē ꝓ binomio ꝓmo nec id
ꝙ remanet ē nūs radix nūi. ꝙ ē binomiū. Si nūo nūs qui ē minu
endꝰ fuit maior nūo qui ē ꝓmo binomio nec id ꝙ remanet erit a
dix nūi nūs nūo ꝙ ē residuum. Si aut est fuit nec remanebit ra
dix nūi ut ꝓdixi. Cum sint diuidē 10 ꝙ 2 pradicē de 2 ꝙ

dice d' 4 mlām' z radice de z ise pmenient 7 radix de
f 8 dam esse 4 .f. quadratū tōtū nōīs diuisoris remanebū z ra
dix d' f 8 īquo binomio diuide malitionē d' 10 ī z radicē d'
z minꝰ radice de 4 mlā 10 p z pradice de z p radicē d'
4 rā pueniet diuide p z radice de f 8 sibi sinoluent diuide
radicē d' 10 pradice de 6 radice de 7 radice 8 mlēnū ra
dicē d' 6 radice de 7 rdc 8 īradice de 6 radicē d' 7 minꝰ
radice de 8 ppuenet 4 radix de 168 q' bīomiū īquo diuide
mlēnt radicē de 10 radice de 6 rādice de 7 minꝰ radicē d' 8
et sinul diuide radicē radicē d' 10 p pradice de 6 radicē d' 7 minꝰ
radice 8 mlēnū radice d' 10 p pradice de 6 p radice de 7 p radi
ce de 8 rā p pueniet diuide p 4 et radice de 168 sic habebat hic
ī sillibꝫ. Inuēp̄ pars 8 inuentione radicū binomiorū et recto-

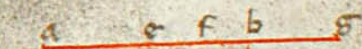
Sinul inuenire radices alicui binomii habentis diuidē nam nom di
ai pcl quare una milenti pallia faciat sphām pcl quadrati mi
noꝝ nōīs q̄z duarū panū radices illic iungere et radix sphi
binomii. Ita quidē q̄z pcl inuenti debeat milinea ostendam. ad
ucenit binomiū g'liter. a.g. et mai' nomīs sit a.b. q' possit sup̄ nūg.
b.g. equale nūo .d. diuidat' a.b. ymediū sit' pūctū .e. et
addat' radix quarte pt' nūi .d. sitq; .e.f. dicet linea
a.b. diuisa ee. inidual pcl que sit .a.f. et f.b. q̄z una milinea
talia est quarte parti quadrati linee .b.g. Cui linea .a.b. pē
mim .d. q̄drati nōīs .b.g. medietas g. q̄nōīs .a.b. sit linea .a.e.
poterit quātū pt' nūi .d. q̄drati nōīs .b.g. et qui linea ab
diuisa ē in duo equalia sup̄ .e. et duo inequalia sup̄ .f. erit milinea .b.
f. et f. a. cui quadrato linee .e.f. equal' quadrato linee .a.e.
et id q̄ fit ex ductu .b.f. in f.a. cui q̄dto linee .e.f. equat' quāti
parti nōīs .d. q̄drati nōīs .b.g. Si quadrē linee .e.f. et quāta
pars nūi .d. q̄ sit q̄ fit ex ductu .b.f. in f.a. erit quadratū q
fit ab dimidio lineę .b.g. hoc est quarte parti q̄drati nōīs .b.g.
hoc uolebam. Et nota q̄ si .a.g. fuit binomiū primū .r.e.c.
erit nūi. q̄z tota .a.f. erit similis nūi cui .a.e. sit nūi et cui tota
a.b. nūi .c. mai' nomīs binomii primi .d. nūi .f. b. erit nūi p. q̄
recto nūo .a.f. et nūo .a.b. romanco .f.b. similis nūi .d. et nat'
et si binomiū .a.g. fuit sexti .vl' tertii cui linea .e. et ra
dix nūi .e. ablatis linee .e.f. Q̄z linee .a.f. .f.b. erit radices
duoꝝ diuisoꝝ nūoꝝ. Et si binomiū .a.g. fuit alterius binomii
reliqui erit linea .a.f. binomii .r. uel .f. b. recisi .r. ut ter
mo euidens hinc. Nam et ita q̄ ostendendo inuenies pars cui .a.f.

p mod' scr' d' mostratū et sicut di
tū de 10 p. z et radice de z mi
radice de z.

ꝛ f.b. insimꝫ quicte ee radice tot binomii a.g. sit q radix
prodis. a.f. hoc. 1.g. ꝛ portiois f.b. sit g. t. duo g.1.t. e
radix binomii a.g. Qm 1.t. diuisa e in duo ss. g. er. duo qdā
portionū 1.g.g. t. cū duplo 1.g. ī.g.t. equales quadro totī hoc.
1.t. sūt em quadrata portionū 1.g.g.t. mū a.f. f.b. hz e nūs
a.b. hz eductā 1.g. ī.g.t. puenit radix ei q sit ee a.f. ī.f.b.
cū a.f. et f.b. sint quadrata portionū 1.g.g.t. hz eductū a.
f. inf.b. puenit quadrae dimidii noīs. b.g. Qr ee a.1.g. ī.g.
t. puenit dimidiū noīs. b.g. g. exduplo. 1.g. ī.g.t. puenit no
īa g.b. g eductū 1.t. inse puenit binomiū a.g. pmū cui maī
nom a.b. sit z z ꝛ mīs b.g. sit radix de 1 1 8 et q hās q
dratū mois noīs exquadrato maioris s. 1 1 8 d 4 z 9 remanet
81 ꝛ duplū a.b. pmedii uenit a.e. 11 quib addit m
dis quite pmo 81 s. 1 1 q sit dimidiū radicis de 81 erit
a.f. tota 16 quib detractis z z remanet pmū f.b. Ita misce
tis 7 p 16 silicet b.f. p.f.a. nimirū 11 z s. q̄rta pis q̄drati noīs.
b.g. puenit uerisimilū accepta utiq radicis mīoris a.f. f.b.
uenient 1 ꝛ radice de 7 pdice z z ꝛ radicis d 1 1 8 ī simꝫ cuic
tor. Et si radix de z z mīs radice de 1 1 8 hec relidis ipm
ee 1 mīs radice de 7 existe demōstrationibz pcis inuenire
hoc sit biomiū a.g. sed cui maī nom sit radix de 1 1 8 mīs usq
1 1 quo biomio maī nom pot z 4 z plus minori cui q̄te pmo m
dix. s.d 6 z addat q̄to medietas maioris noīs. s. radicis q̄rte
partis de 1 1 8 et radix de 1 1 z ꝛ radix de 6 z q̄b insimil iuncg
faciūt radicē de 1 1 z pluēs a.f. ꝛ ex ea q̄dē radice de 6 z ex
radice de 1 1 z silicz e.f. ex e.b. remanet pluris f.b. radix de
7 ꝛ sic pdice de 1 1 8 ee 1 1 Isimil q̄uctur hec radix ra
dicis de 1 1 z ꝛ radix radicis de 7 . Qr pdice radicis de 1 1 8 mīs
1 1 hec radix radicis de 1 1 z mīs radice radicis de 7 Ex q̄b pmi
sis uenies radices tot binomii ꝛ ei recisi.

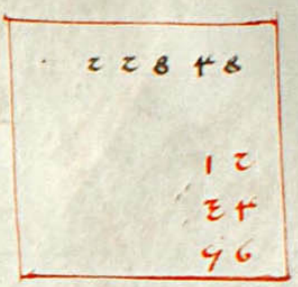
Nam si radices quarti binomii inuenire uis. adiacent ite
binomiū a.g. e maī nom a.b. sit z o mīs q̄z b.g. sit radix
de z 1 o ex quib noīb maī nom pot 1 6 o plus minore. Radix
q̄rte pris q̄z silicet de 1 o si addat dimidio maioris noīs s. hec
a.e. hēbit 10 ꝛ radix de 1 o pluēs a.f. q ei aggregari nō possit
e tota linea a.f. binomia. Qr relidui f.b. e recisi q̄drice 10
mīs radice de 1 o hec utiq diuisa q̄drātū a.f. f.b. radices
ī unū q̄uctę sit radix de z o ꝛ radicis de 1 1 o Ita radix relidui ī
q̄ a.f. ss. bindat f.b. e radix de z o mīs radice de 1 1 o et sic dicy hec

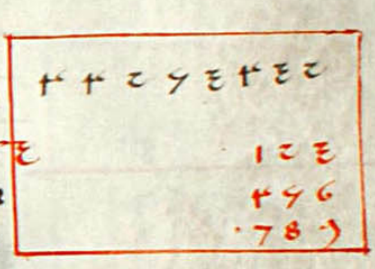
oportebat ostendere et ut
hec habeatis in uno sit bi
nomii a.g.



hūc modū ifinuacōe medicī quīta ſperi bīnōmiū recōr reſidūi poſſerīs mutatīs poſſe reuiare. Expliciūt regule de quadratis radicib⁹
Incipit pars quīta de ſūctione radicū cubicaꝝ et de additiōe et
multiplicatiōe et extractione ſeu diuſiōe earundem

Cubus quidem nūi ſiue quātitatis trium equaliū nūoꝝ
p̄ exactiſmo quadrato nūi multiplicē ducto ut 8 et 27
Cubus 8 ſiue quātitatis 27 in 27 ducta in ſe exactiſme
quadrati multiplicē ſ. in 27 fiet 27 ſiue cubus ternarius
ut exactiſmo quadrato ducto multiplicē q̄ 27 Iam patet cubica
[illegible] 27 fiat intelligat de reliq
[illegible] Reſtat aūt nūi quicūq; nūi ſiue radi
cem cubicā habentis nō poſſit. Nūi radicē habentis cubicē
hinc Vnaquāq; ſcā ſpēq; quīte mōdi cubica cuiuſ nūi regūl
[illegible] nūi nūi mōdi requirit habebit poſſe
[illegible] Cubus linee diuiſe indiuiſ poſſit
[illegible] Cubus ſuperficiei quadrati unius cuiuſq; ſcīoꝝ
[illegible] Cubus ſuperficiei ſuperficierū. q. ſ. b. cū ſuperficie quadrati
ſuperficierū. q. ſ. b. cū ſuperficie quadrati ſuperficierū. q. ſ. b. cū
ſuperficie [illegible] cubus linee. q. b. quīte nūi
ſuperficiei. q. 4 radicis. ſ. b. et radicis. ſ. b. et ſuperficiei cubi
ci 27 et 8 ſuperficiei 54 ſuperficie quīte et 12
nūi 64 et 12 radicis 96 cubus nūi
12 4 [illegible] 4 ſuperficiei. 4 ſimul 12 4 et cubus 12 4
[illegible] 12 ſuperficiei 10 et cubus 1008 ſuperficiei
que [illegible] 10 ducatur in ſe fiet quadratū et duc
tū in 10 ſ. 600 120 ſuperficies 1728 ſuperficiei 12 [illegible]
[illegible] cubicate [illegible] quadrati equalis
ut nūi [illegible] 12 ſuperficiei 96 ſuperficiei
[illegible] 8 [illegible] 8 [illegible] 8 [





ē qui sūt nūi cuui qui fiūt ex nūis p̄mi gradus. Ia cub̄ numerus ē 1 .Vnarii 8. cubi 17 Quadrenarii 64. Quinarii 125 Senarii 216 Septenarii 343 Octonarii 512 Nouenarii 729 Et cub̄ ultimi decenarii ē 1000 quibz p̄ordinē cor deten̄ cognitis, q̄ cubꝰ q̄drās cubici nūi⁹ sequentis ē unius figure & una figā. Quatuor nō figurarū q̄libz ordinis cubici ē nūꝰ duarū figurarū septē aūt figurarū octo nouē. Quadrās nūi trium figurarū sic semp̄ accrescit ēscendo nūi ut duarū ul̄ trium figurāl nūi⁹ sequentis ēcrescit una figura tm. His itaq; intellectis opus est docē qualit̄ inueniat differentia q̄ ē inter aliq; cubū nūm & sibi sequentē mixtū ex q̄drāte unius p̄dictē alterius q̄ p̄uenit triplicato. & ultimo addat 1 q̄ p̄uenit ex cubicatione unitatis q̄ quadrās maioris cubi sequentis minoris. Vbi q̄ nolo scire quātū addat cub⁹ qui fit a. & si cubū qui fit 8 mixtus q̄drāte & 3 triplicat̄ ē 18 quibz addat 1 ē 19, ponit̄ recta quēlibz q 19 si addat̄ sē cubū qui fit a 3. s. sup 8 uelet 27. s. cubz qui fit ex 3. hūs explicatis inueniat quadrās 27 sedz ex p̄mi quitate. p̄mū quidē accipe maiorē quadrātē qui hūt 27 integrū & ex quoz cubū s. 27 extrahe 27 remanēt 0 & quadrās cubici de 27 ē & remanēt 0 q & sic linea .a.b. ipsi tocalib 0 addita differentia que ē inter cubū qui fit a & cubū qui fit a 4 qui distabit inuenies extripla mixtionis de & i 4 unoadecto ul̄ extendat 27 & 64 que differentia ē 37 exquibz 0 sit plus medietate. Quā adde & sup lineā .a.b. scilz .b.g. inueniēs cubz nūi .a.g. qui q̄ inuenies cubicalo secundū .a.b. & .b.g. erit 27 scilz sic addā triplū .quadrati. nūi .a.b. i .b.g. & nō ex triplū quadrati nūi .g.b. in .b.a. hoc ē 2 & 4 ex 8 aquibz mixtus in 27 de fit 8 4 ergo radix cubicata 27 ē 2 & hinc addā 8 4 q̄ ipsi totali donūm q̄ueat extripla .a.g. i 4 que sūt radix sequentis cubi nūi ē 4 2, exquibz p̄dā 8 4 ē q̄ remanēt p̄ns .q. addo nūm .b.g. 10 q̄ fit .g.d. cui cubz qui ē 1000 extripla p̄dā .a.g. ducta in .g.d. scilicet cū 4 6 10 & nō extripla quadrati .g.d. ducta in .g.a. scilz 1/2 10/100 exhede 8 4 remanebit 1000/8 ex 124 ergo radix cubica de 27 ē 10 2 s. 4 & remanet unde parū amplius de 2 uni minori. quā tota sup̄portionalitēr ad unū q̄ueat extripla .a.b. i 4 plus ni mix ad radicē de 27 de uelet.

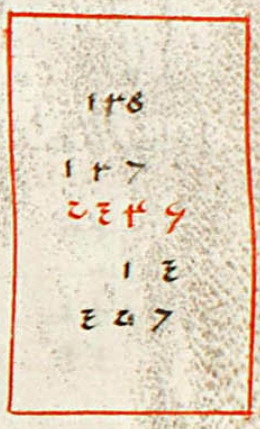
Si uis inuenire cubicā de 900 iam scis q̄ radix eoz quā habet integrū cū sit nūs tali gradꝰ ē una figā tm. q̄m accipe ē q̄ cubz ē 729 extractis ex 900 remanēt 171 & inuenies differē

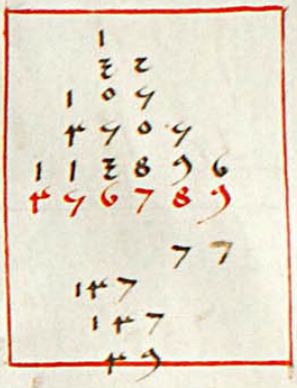
3 b 8 d

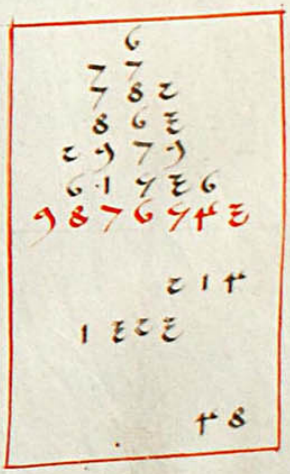
h̄ est exēplo 8 1/2 & in c.

que ē acubo nouenarii usq; ad cubū decenarii que dicitur est 71
portiona & residua 171 ē 71 uenient pro mutuo $\frac{2}{7}$. quia
duax tertias cubi s. $\frac{8}{27}$ ēhede 171 remanebūt $\frac{19}{27}$ 170 dīn mil
tiplū quadrati 9 . s. 1 $\frac{2}{7}$ 2 $\frac{2}{7}$ hē accipe $\frac{2}{7}$ d' 1 $\frac{2}{7}$ 2 eī 162 qđ
hede $\frac{19}{27}$ 170 remā $\frac{19}{27}$ 8 dīn accipe qđ ornatū d' $\frac{2}{7}$ ē $\frac{2}{7}$ qđ tripla ue
nient $\frac{1}{7}$ 1 q̄ nūm mīcap 9 uenient 12 q̄ eī nō possūt ēhē de
$\frac{19}{27}$ 8 ēhet $\frac{19}{27}$ 8 d' 12 remanēt $\frac{8}{27}$ 7 diminuti . ergo radix
d' 900 ē $\frac{2}{7}$ 9 . uelut ūn $\frac{8}{27}$ 7 hoc ē albyra $\frac{2}{7}$ 9 ō $\frac{8}{27}$ 900 q̄ duces
sīe $\frac{2}{7}$ 9 fiunt duas . s. 79 . et cubi mīus 79 . et cox cubū p 7 di
uisere . s. p cubū nūeri . ēt figūr' adueniente 900 uenire
uis mīti $\frac{2}{7}$ 9 p 10 . q̄ p̄ueīt triplica p' triplū $\frac{2}{7}$ 9 p 10 mī
ta erūt 790 . Inquibz diuide $\frac{8}{27}$ 7 . q̄ p̄ueīt ad ce d' 9 ibi
uebis p̄positum .

Rursus inuenire radicē d' 1 $\frac{2}{7}$ 4 9 Iā scis q̄ radix cox q̄ hūt
integrū ē nūl' duax figūr . Q̄ ultima figā ipī radicis p̄tēdā
& sub sēd gradu . Iam que figā ipa ee debet . Scio q̄ ex
tres figūr' que fiunt tūl . sēdo . p̄mū gradū re
manēt 7 ex quibz accipe maiorē radicē quā hūt integrū q̄s
1 remanēt 1 & radicē . s. 1 p̄dēs sub 7 p 1 q̄ remanz p̄dē 1
sīe 7 . et copiab' ipm cū 1 $\frac{2}{7}$ 4 eī 1 $\frac{2}{7}$ 4 . sic p̄dūcē de 7 1 $\frac{2}{7}$ 4 hūt 10 . s. 1
sēdo gradu . remanēt 1 $\frac{2}{7}$ 4 p quibz ante positū 1 opz ponere
tale figūrā sub 4 . s. miltera ipī p triplū quadrati positē figē
sub 2 . nec nō . miltera eiusdē positi figūā p triplū quadrati p̄dē
te figūē . et . cubū . scubtera ipī p̄tēda figā . & omīa exīta cū
fuerīt de 1 $\frac{2}{7}$ 4 nūl remanent ūn ultra triplū miltarioīs radicis
integrē radicis ī nūm sequētē inordine nūoz q̄m figūrā ī uenīre
nō poteris nī exustato ābitio . Fit enī ipī figura 7 . s. positi sub
4 triplicab' quadrati positē figūē erit 7 q̄ ponet sub tēo gradu .
q̄ cū miltere sēdo gradus inse tūl gradū facit . miltab' positi 7
sub 4 p positi 7 sub 7 eē 9 q̄ēbe exoplatē d' 1 posito sē 7 cū
sequētib; 7 . s. d' 17 remanēt 1 & p̄dē sup 7 tūl gradus . tripli
cab' quadratū positoz tūl sub 4 eē 17 . s. p̄dēs sub sēdo . p̄mo gdu .
q̄ cū p̄mo gradu miltat se ipm p̄mū gradū facit . & remanēt ī
ipo miltab' ipī 7 p 1 positū sub 1 . & ēbet ipam miltatē exo
platē quadrati positi sup 7 . & sequētis quadrati . s. d' 1 $\frac{2}{7}$ 4 re
manēt 17 sup ipa 1 $\frac{2}{7}$ 4 q̄ copiab' 4 p̄mi gradū eē 179 . d quibz ēbe
tibi tūl mīti positi sub 4 . s. 17 remanebūt 1 $\frac{2}{7}$ 8 q̄ nō ex cadit
triplū miltarioīs radicis inuente . s. d' 1 7 in nūm q̄ sequitē . s. 1
1 $\frac{2}{7}$. & radix cubicade 1 $\frac{2}{7}$ 4 eē 1 7 remanēt 1 $\frac{2}{7}$ 8 . acceptis &







tur fatuum 1947 ex quibz extrahe mlcationē ꝑme figuiē d' 64
ī 8 .s.272 remanebit simili 1917 que sic habitabit triplū mlca
tionis te 278 ī 72. Ergo inuic aubrand' 46789 ē 78 et remanet
in 1927. Quod relictum addic sup ꝑdictē 78
Rursꝰ simul inuenire radicē de 46789 diuisi tribz ꝑmis figiē radi
ce relinquaz trium .s. de 446 qē 7 pōe sub scdo gradu 7 residuū
quod ē 112 pōe sic eis 7 triplū quadratē 7 .s.147 pōe ut supius ter
minatū sub tcio gradu 7 statim inuenire figuram que ponenda
ē sub ꝑmo gradu ad pōita 7 ꝑmod' demōstratū. Cubz 7 sic pōe sub
ꝑmo gradu 7 mlca cubz 1 d' 147 erit 7 sēper ex 11 q' sub sup 44
remanet 4 sic ꝑmū gradū scōplā cū 2 sequentibz tribz 442 dēpt
tolle mlcatē cubz 7 dic 4 de 147 remanēt 14 sic 142 qbz copletis
cū 7 erit 1 47 ex quibz tolle mlcatū cubz 7 ꝑmi gradꝰ in 7 qđ 49
remanebit 108 sic 147 d' in triplo quadratū septenarii ꝑmi gradꝰ
erit 147 terminatū in ꝑmo gradu que ordinate ꝓlixꝰ diffinendo ꝑ
7 que sunt ꝓita sub scdo gradu scdz q' mtiplicatōnē nūoz tocꝰ
mi mlcati. Sūt exinde ducto ī 7 uenit 7 quibz extractis de 10 re
manēt 3 sic 0 ter 1 ducti ī 7 uenit 28 quibz extractis de 28 re
manēt 10 sic 28 tercio ducti 7 ī 7 uenient 49 quibz extractis d' 108
remanēt 59 sic tertiū scdi gradū quibz copulatis cū 9 ꝑmi gradꝰ
fiunt 599 ex quibz ꝺēpe cubū septenarii .s. 343 remanēt 256
Sic inde inuenta ē 77 remanēt 179
Adhuc simul inuenire radicē de 98769 diuisis figuris tribz ꝑmis
is figuris remanēt 9876 quibz ꝓtis malū ꝓpe cor radicis ī
uenias ordine demōstrato est 71 remanebit in 6149 ꝓpe 971
sub tcio scdi gradu cui radix septē figuras sit nūz figiē cui rema
nentia 619 pōe sic 876 Ve ostendis triplū quadratū d' 171 est 2241
que ponenda ē cuiuslibz mtio gradu unde cuiuslibz mlcatō multa
tis in se q' ꝓita ē sub scdo gradu. Cubz in ꝓtis cui ablati figiē cor
sub sexto gradu d' in pōe 4 ad 12 q' figiē inuenie exemplificatio sicut
demōstratū 7 mlcatis ipis 4 quibz figiē ordinate de 1224 cui
apiet ꝺēpe 6 q' sunt sic septimi gradū. quia cui ꝑmi gradꝰ septimi mlcatꝰ
septimi gradū facit. ergo mlcatis 4 in 1 ꝺēpet de 6 remanebit 2 sic
6 7 2 in 4 ꝺēpet de 12 remanebit 6 sic 1 7 2 in 4 ꝺēpet de 876 re
manebit 87 sic quinti 7 sexti gradū 7 2 in 4 ꝺēpet de 8769 re
manebit 8769 sic septimi 7 sexti 7 quinti gradū. d' in triplū
dracti d' scdi 98 7 pōe sub scdo gradu 7 mlcatis 4 ex pōis 98 d'
12 pōtis ī radice est 8 q' ꝺēpendi sunt d' nūo mltiplicato ī sexto gradu
d' 96 q' cui scdi gradꝰ mlcatꝰ tertii. quarti gradꝰ facit remanebit

78 exipit 86 sr̃ quīti ꝙ quīti gradū ꝙ cad' ꝑ mlt'ab ꝑ 1 de 71
erit ꝑ que exhendi ꝫ tm̃io tm̃inate ī tcio gradu. s. de 78 ꝙ
q; cū sēc̃ grad' sēc̃y mlt'ar tcū gradū fac. remanebit 779 sup
quīti ꝙ sr̃ti ꝙ tcū gradū. tm̃ mlt'anda ꝫ 8 q̃ retinet d' 78 gra
dū ꝑ cad' 71 . ꝫ mlt'ab 8 ꝑ 71 faciūt 16 q̃ exhet dm̃io ter
minate. in tcio gradu. q; cū ꝑmi grad' mlt'ar tcū. ꝙ tcū grad'
fac' remanebit 762 sr̃ quīti ꝙ sr̃ti ꝙ tcū grad' ꝙ 8 ꝑ 1 faciūt
8 q̃ exhet dm̃io tm̃inate. in sēc̃ gradu. s. d 762 ꝙ cū ꝑmi grad'
mlt'ar sēc̃y sēc̃y gradū faciūt remanebit īm 7626 sr̃ quīti
ꝙ sr̃ti ꝙ tcū ꝙ sēc̃y grad'. q̃ copl'a cū ꝫ sūt ī ꝑmo gradu er 7626
d' quib; exhe cū tc̃ ꝑ. s. 61 remanebūt 76199 sr̃ radicē
cum eis q̃ 71 eodēq; modo si radicē alicui' nūi octo ꝙ no
nis figuras reppire uis relictis ꝑmis figuris radicē reliq; ꝙ
d'monstrati' mod' īuenire tuearis. tc̃ in copl'ato residuo eay
dē tribz dimissis figuris faties sēc̃y q̃modo ferm' ī uenies q
sicū sicuis uoluīt. eadēq; una tc̃dine poteris opari ī repien
dis radicibz cubicis nūor tcie ꝙ pluī figuraz.

Sequit de inuentiōe radicū cubicay ꝙ nāq; de
suis mlt'are multiplicatiōe eay dē ī tcia sc̃.

Si radicē cubicā tc̃ 10 ꝙ radicē cubicā tc̃ 60 mlt'a 10 ꝙ 60 er
71000 quor radix cubica ꝫ id q̃ queris. ꝙ si uis mlt'are
ꝙ radicē cubicā tc̃ 90 cubica er 124 ergo uis mlt'are radicē
cubicā tc̃ 124 ꝙ radicē cubicā tc̃ 90 Oēs mlt'ab 124 ꝙ 90 ꝛ
q̃ ꝙueniēt radix cubica. ē illud q̃ queris. ꝙ si uis mlt'are du
as cubicas radicū d' 10 ꝙ tcia radicū cubicā d' 10 reddige
eas ad radicē cubicā unī nūi ꝫ ꝙdualz radicibz d' 10 cubica
t er 8 q̃ mlta ꝙ 10 er 160 q̃ radix cubica ei' duabz radicibz d' 10
similr ꝙ tribz radicibz tc̃ 10 cubica t er 27 q̃ mlta ꝙ 10 er 1080 q̃
radix cubica ei' tribz ꝙ radicibz tc̃ 10 . cubica ꝫ 160 ꝙ 1080 ꝛ
quod ꝙueniēt radix cubica. ē ill' d' quod q̃rit. ꝙ si tc̃ uis mlt'are
radicē cubicā d' 10 ꝙ aliquid unī ꝙueniat aliquis nūs dat' urdina
ti' 10 cubica 10 er 1000 q̃ diuide ꝙ 10 eruīt 90 q̃ radix cubica ē
id quod queris.

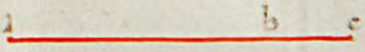
Et si uis inuenire duas radicēs cubicas nūor rōnabilū q̃ simil'
mlt'ata faciant nūm rōnalē. Cubica unī nūi q̃lē uis
ti inuenias duos nūos q̃ insimil' mlt'ati faciant ipm cubū nūm.
Cubice aūt radicēs ipōr duor nūor er questa. Vbi gr̃ ei
nūcetur 6 er 216 ꝛ inuenias duos nūos qui insimil' mlt'ati fa
ciāt 216 eruntq; 9 et 24 quor radicēs cubice sūt quesite. ꝙ alī-

adiacentē tuo mīi quadrati ſſmic ſimilē ꝑ 9 et mlta
mīi quenq; ipōr ꝓmice alteri ꝙnīt 12 9 18 ꝙe radices
ſimilis mltē facīt radicē cubi mīi ut querebat.

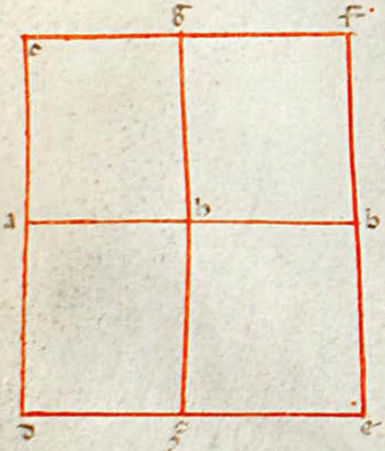
Si uis diuidē radicē cubicā d 100 ꝓdicē cubicī de 9 diuide
100 ꝑ 9 puenīt 10 ꝙe radix cubica & idq; queris. Et ſi diui
ſeris 9 ꝑ 100 puenīt 10 cui radix cubica & idq; pueīt erit ꝙ
ere 9 diuisi ꝑ radicē d 100. Et ſi uis diuidē 8 ꝓdicē
de 27 cubicē de 8 .ſ. 9 12 diuid ꝑ 27 ueīet 16 ꝙe radix cubi
ca & id q̄ris. Et ſi uis diuidē radicē de 80 ꝑ 2 diuide 80
ꝑ cubī binarii ueniēt 10 ꝙe radix cubica & idq; queris
ꝑ radicē cubicā de. 9

Si uis diuidē octo radicē cubicā de 10 ꝑ radicē cubicā d 9
reddiget ꝓportē q̄ radicī adradicē una .cheb 9 12 0 ꝑ octo
radicū d 10 ꝑ radicē unitatis de 9 habebīt radicē de 12 9 cubicæ

Scias in addite .idest Explicat d multiplicatōe radicū ſ ſuap d diuiſoe
ggatē radicī cubicæ eiusue cubo quo mē radicē eiusmōi eqūī & ſe
quadratoꝝ uicibꝰ q̄ quedā queri possūt mē ſe aggregari .idest et diſggai
nō. Cum uaꝝ ubi radicī mē ſe ꝓportiōe huiusmōi cubicus
mīs ad cubū mīmū. cuic mē ſe aggari possūt .idest diſggari. ut
eas ꝙe cubi hūt ꝓportē ſicē cubi mīs ad cubū mīm. aggrie
mīs radicē ipōr cubor .i ſimil addē .ig puenīt cubica cubi
cam ſīmā mlta ꝓportionalitatē q̄m hūt cubi ipōr radicū ad
cubos ꝓportiō. Ubi gīt mīs addē radicē radicē cubicā d 16 cū
radicē cubicā de 9 ꝙe mīor ꝓportio & ſicē cubi n 8 ad cubū
mīm 27 .i. mīs quīq; ipōr duplus ſui cubi. Add & radicē d 8 cū radicē d 27
ſ. 2 cū 2 erūt 9 q̄ cubica ē 125 q̄ mlta ꝑ 2 ꝓdūc 16 & 9 q̄ ſimi
mplā 8 & d 27 erūt 250 ꝙe radix cubica & additō quēlīt &
ſi ipāl radicē diſggatē mīs radicē de 8 eritdicē d 27 q̄be
remanebit 1 cui cubū .ſ. 1 mlta ꝑ ꝓdūm mltitudīē .ſ. ꝑ 2
cheleb radicē de 2 ꝓueniūt ſūte eritdicē. ſi ē ſunt addēte
radicē cubicā de 9 cū radicē cubicā 27 ꝙe mīor ꝓportiō
ſicē 1 ad 8 .i. mīs quīq; ex quadruꝑ ſui cubi. Cui radicē cu
bicā d 1 adde cui radicē de 8 erūt 2 ꝙe cubū .ſ. 27 ſ. quadruplici
erūt 108 ꝙe cubicā .ſ. ꝙe radix cubica & additō ſūte. Et ſi
radicē de 9 extrahē mīs eritdicē d 27 radicē de 1 eritdicē
eritradicē de 8 remanet 1 cui cubū .ſ. 1 quadruplici erūt 9
ꝙe radix cubica & residuū ſūte eritdicē. Sīlr ſi linea .a.b.
radix cubica de 27 & .b.c. ſit radix de 9 .i. cubo ſuae
radicis .i. a.b.c. Cui licet .a.b.c. duplū & duo ſit pūcta .b.


a
b
c

a
c


e
f
a
b
d
g
c

a 6 f̄ linee cub. Cui radix est illud quod p̄uenit ex radice de 8 in radi
ce de 6 f̄. s. d' t̄ f̄ sechies 8 p̄ solido qui fit a quadrato linee. e. g.
in linea. e. d. qui est 8 addimus eū t̄. silicet eū cubo linee. e. d'. d
quibus sit auferat duplū solidi qui fit a sup̄fitie. a. d. e. b. in hēa.
e. d. hoc est duo solidi qui fiunt a sup̄fitie p̄dicta. a. s. f̄. e.
f. g. elevata in altū secūdū linea. e. d. remanebūt solid' q̄ si
eleuatur in altū secūdū quantitatē linee. d. e. s. f̄. quadrati linee
g. l. ingnote. q. f̄. quadrati. e. a. in. g. Illa solid' qui fit a sup̄fitie.
a. d. h. eleuata ī. d. e. hēat equalitatē. b. e. ī. e. d. ducta in. e. d.
hoc est equalē linee. e. d. ī. e. g. q. multab radicē de t̄
ueīa radix d' 10 t̄ f̄ multab p̄ b. e. hoc est p̄ e. g. fiunt p̄dicta
de f̄ ueīa radix illi q̄ p̄uenit ex duplo f̄ dimidii de 10 t̄ f̄ ex
8 ī 41 t̄ q̄ radix est q̄ p̄uenit ex 8 ī 41 t̄ et d' q̄ p̄uenit ex t̄ ī 8 silig
radicē d' 8 radicē de 41 t̄ q̄ solid' qui fit ex. d. e. ī. e. g. p̄dicta.
i. d. ēr 16 q̄ duplū extrahende f̄ remanēt 8 p̄ quo
mato linee. g. d. in linea. d. e. Et si uolueris 8 p̄ linea. d. e. fac
p̄dictā cubicā de t̄ ueīa radix ē de 16 p̄ quarta linee. g. d.
hoc est p̄ latitie quadrati. a. g. Et radix quadrata reducti
16. s. radix cubicata f̄ 8 ut in. h. a. hoc est. g. d. q̄ si radicē d' t̄
auferat radix cubicata f̄ remanēt radix ex f̄ ut p̄ius modū
inuenimus. et q̄ inuenta hēat. g. d. equalē linee. g. e. et ita habē.
d. e. duplū linee. e. g. Vel e hoc manifestū est q̄ cū inquā nūc
fuit octuplū alterius tūc radix ē minoris. et cubo duplū radix cubi
minoris. Vñ radix cubicata t̄ solius minoris remanēt f̄
Et si uis addere radicē de t̄ cū radicē de f̄ tūc uis addere duas ra
dices de f̄ q̄ una radicē de f̄ q̄ per q̄rtā p̄portionē p̄uenit ex radi
ce de f̄. hoc est radix illi q̄ p̄uenit ex quinto t̄ ī f̄ similiter cū tres
alteri radicēs de f̄ et radicē de t̄ tūc addas tres radices de f̄ cū
una radicē de f̄ remanebit una radix de f̄ ut modo inuenimus.
et ut melius declaretur quantū radix de 125 radicis de 1715 q̄
p̄portio est sicut cubi 7 decimi t̄ f̄ et unus quilibet eorū qui p
se cubi. Et due radices quarū cubus est t̄ 7. dic q̄ te uelle
addere tres radices de 4 et unā radicē de 4 q̄ quilibet p̄uenit
ex radice cubica de 4 et hoc est una radix de 4000 et simul cū
radicē de 125 et radice de 1715 q̄ est radix de 4 excepta u
nitate q̄ remanebit quelibet radicum de 4 sicut una radix de t̄ et
sic intelligi quelibet radicū cubicarū reliquarū
radicū que q̄libet nobis addere uolumus pellit una
addē radicē cubicā de 4 et radicē cubicā de t̄ q̄ueniet q̄ expli

Fines huius capli finē ipōm̄ Inuenias capitulū quātitatū decuplū d regulis geometrice positis ultima capli ⁊ tres ꝑ mētē ꝑtentas; et d quibus alchwarizmi & abalate

ꝓma ē tꝛiū ꝓportionū tꝛiū ꝙsitoꝝ quātitatū addendaꝝ inuentio ꝑ alamucabale

tionū geometrice ꝓpositū solutionē reddigit. Secūda ē ꝙdo

ductione quaꝝdā ꝙstionū geometricaliū. tertia ē ꝙdo ad

gebre ⁊ almucabale. ¶ Incipit pars ꝓma.

Sint ꝓpositę tres nūi ꝓportionales. a. b. b. c. c. d. dico ꝙd ꝓportionem

ductus a. in d. ad ductū b. in se. ita. b. ad. c. ita. b. in c. ad. c. in d. Sit quidē nūer a. b. 10 ⁊ nūer. c. d. sit 9 ⁊ quemcūq; diuidentem nūm a. b. in b. c. qm̄ ē sic. a. b. ad. b. c. ita. b. c. ad. c. d. ē ergo sicut duo antecedentes ad unū ipōz ita ⁊ reliqui antecedentes ad unū

sequentē hoc ē sic. a. c. ÷ sedz ita. b. d. ut ē ad. c. d. q̄rtū ⁊

sit nota ꝓpositi ⁊ q̄rti et q; 9 quatuor nūi sunt ꝓportionales multiplex

ꝓmi ad q̄rtū equatur multiplici secūdi ad tertiū ē enī ꝓmi. a. c. 10

et quare. c. d. ē 9 q̄z multiplex que ē 90 equatur multiplici. b. c.

sedz. ī. b. d. ter nūi diuidatur ita q; nūs. c. d. scilicet ī duo ex q̄bꝰ pri-

mi. c. ē una q̄z ꝓpositio erit ⅓ ⁊ ē. q̄z. c. d. nūs diuidit̄ in duo ex

q̄bꝰ duo ex se. c. et ei adiuncte ē nūs. b. c. ē multiplex ad nūm. b.

c. ī totū. b. d. cuiꝰ quadratū nūi. c. e. equal' q̄drato nūi. b. c. ē

enī multiplex. ex. 9. in. b. c. ī. b. d. 90 ⁊ quadratū nūi. c. e. ē ⅓ 10

quinq; ī similiꝫ uicēs sumit ⅓ 110 ꝙ quadratū nūi. b. e. q̄m

dix. f. ⅓ 10 ē nūs. b. e. Quinq; autē quadratū nūi. e. e. scilicet ⅓ ⁊

remanebit. b. c. nūs 6 quinq; q̄drati nūi ex nūo. a. c. scilicet ex 10

remanebit nūs. a. b. ⁊ q̄z ꝓportio sic ē nūi. a. b. ad. b. c. ita

b. c. ad. c. d. ⁊ a. b. sit ⁊ ⁊ q̄drati ex nūi. b. c. ⁊ c. d. sit 14

erit ꝙ sumat. a. b. ꝓmi ad. a. c. sedz ita. b. c. ita. ad. b. d. q̄rti

multiplex si quidē ꝓmi ex ꝙsitis. f. ⁊ ꝙ 14 erit 60 quinq; ex ꝙ multiplex

sedi. a. c. ī totū. b. c. q̄ addat sup 60 multiplex medietatis nūi. a. b.

inse. erit 64 ex q̄z radice auferat medietas nūi. a. b. remanebit 6 ꝓmi nūs. b. c. quinq; ex medietate nūi. b. d. remanebit 9

ꝓmi nūs. c. d. ¶ Et nūi sic sit. a. b. ad. b. c. ita. b. c. ad. c. d. ⁊

b. c. sit 6 q̄drati ita q; ex nūis. a. b. ⁊ c. d. sit 12 q; multiplex

ꝓmi equalis multiplici secūdi ut ex numeris nullis ꝓportionalibus ad

sedz nūm ex multa erit. ⅔ 6 quinq; ex ꝙ multiplex ex. a. b. ī. c. d.

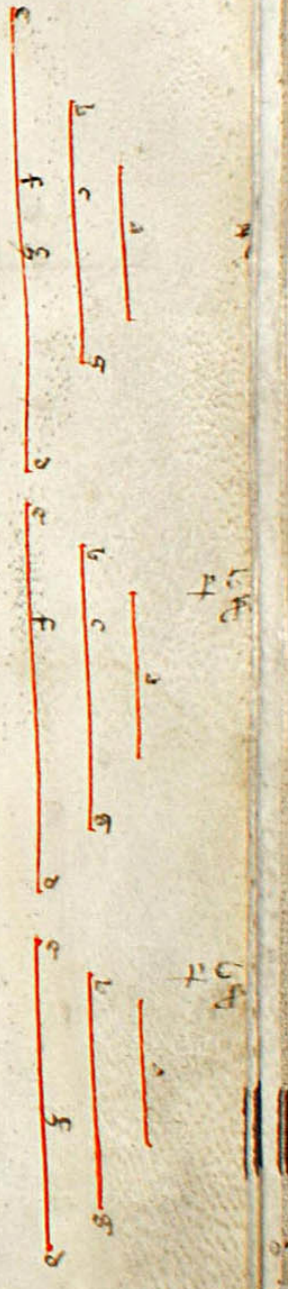
adiacebit ita q; nūs. d. e. ex quo nūo. a. b. q̄ totus. c. e. ē.

12 quinquies ducit̄ in duo ex q̄bꝰ ꝓmi. f. erit una q̄z ꝓpositio ex ⅔ 6

⁊ q̄ nūs. c. e. ducit̄ in duo ex q̄bꝰ secūdi. f. ⁊ in duo ex illis sit. d.

firmet rectu angla in equalia pononū .s. mlcano .e.d. und.
c.g. quadrato nūi .d.f. equal' quadrato nūi .d.f. qē mlter
e.f. siluer ½ 6 unde er' ½ ℔ d'quibz auferat mlcano ex .a.
b. hoc ē ex .e.d. i .d.c. que mlcano ē ½ 6 remanebit ½ 6 p
quadrato nūi .f.d. qđ radix .s. ½ ℔ ē nūs .f.d. quibz addat
sr nūm .e.f. erit tot' .c.d. g quibz extat ex .c.e. s. ex .1 ½ re
manebit ½ pmo .d.e. sz ē pmo .a.b. ℔ ista collectio ex nūis
a.b. b.e. e.d. sic 19 ↄ quotiens quilibet unit' cāt hoc pot fi insti
tuit modus ex quibz pona unus modus sumat' tres nūi annue
proportionales sitq 1 ℞ ℔ ℞ ℔ quor insimul nūs e' 7 mgl'
differe mlcationes d' 1 ℞ ℔ ℞ ℔ 19

Rursus sit sicut .a. ad .b.g. ita .b.g. ad .e.d. ℞ sit ℔ nūs .b.e. cāt
nūi .b.g. sr habuit nūm .a.c. nō mus .e.d. sic g. sumat' ex
pmo .e.d. nūs .e.f. equalis sr fluo in quo nūs .e.d. sr hūdat
nūm .b.g. erit itaq sic nūs .e.d. pmi .a.b.g. scdi .ita .e.f.
tci .ad .b.c. qrti mlcabz g .e.d. i .b.c. qui sit non e' 18 qbz
equatur mlcano .b.g. i .e.f. ē ½ .f.d. cāt nūo .b.g. g. educ
to .e.f. in .d. puenit. 18 qm auferat' equadrato medietas
tis nūi .e.d. que medietas sit .e.g. remanebit ½ ℔ radix
ē ½ 1 que sit quantitas nūi .f.g. quibz extractis ex .g.e. remā
bit ℔ p .f.e. quibz ℔ extractis ex .e.d. remanebit 6 p .f.d.
hoc ē p .b.g. ex quibz extracta ℔ sit .b.c. remanebit .e.g.
hoc ē .a. ℞ ℔ bz sic .a. ad .b.g. ita .b.c. sit .d.e. f. sic .a. ℞
.e.f. sic ℔ mlcabz g pmi nūm .a. notā p qrtū .e.f. e' 17
quibz equatur mlcatio scdi .b.g. i cubū .b.c. ℞ notā .e.g. ℞ sic
cāt .a. non .qr dimidiū .e.g. silicet ℔ in sic mlcat' e' ℞ addē 17
q puenit ex .b.c. i .b.g. e' 16 d' qđ radice tolle ℔ silicet dimi
diū .e.g. remanebit ℔ p .e.b. nūo quibz addit' cāt .e.g. e' 6 p
nūo .b.g. hoc pmo .f.d. quibz addito nūo .e.f. habebit ↄ p
nūo .e.d. ℞ sic ęqnā nūs .b.g. nos qui sic 6 ita nūi .a. e.d. sic
ignoti .ita sic .e.g. 4 i quibz nūs .e.d. sr hūdat .nūm .a. qm e
sic .a. ad .b.g. ita .b.g. ad .e.d. cui itaq mlcatio ex .a. i .e.d.
equal' quadrato nūi .b.g. qm quadratus ē ½ 6 g educta .g.d.
qui ē equal' .a. i .d.e. ; puenit ½ 6 qbz si addat' quadratus medietatis
nūi .g.e. silicet ℔ 6 erit ℔ ℞ d'quor radice .s. de ½ 6 ℔ tolle ½ ℞
s. dimidiū .g.e. remanebit ℞ p .g.d. hoc ē pmo .a. quibz addito
4 e' ↄ puenit nūo .e.d. ℞ si ppōrem' differentias ppōnales in qua
dratis ut in cubis erit quilibet nūor ordinis ppōnalis .que-
nirem itaq omnia que dixim' i cubis . q. cā fuit sic pmi nūs ad



sedi ita sedi ad tertium. per equale erit sicut quadratus primi ad quadratum sedi.
ita quadratum secundi ad quadratum tertii. nec non si coniungantur erit proportio summe quadratorum
primi et sedi ad quadratum sedi sicut proportio quadratorum secundi et tertii ad quadratum tertii et econverso
erit quod si sicut quadratus primi ad quadratum sedi. ita superfluum quod addit quadratus sedi super
quadratum primi ad id quod addit quadratus tertii super quadratum secundi. et hoc omnia accidunt in cubis.

Sunt tres numeri ex quibus primus et tertius. Modus alius proportionis inter tres numeros
sunt noti. sedus autem est ignotus. sed proportio super habundantie maioris super
medium ad super habundantiam medii super minorem est sicut maioris numeri
ad minorem. proponuntur numeri diversos quos vis pro maiori et minori numero.
sumpsimus 20 et 12 et auferatur 12 de 20. remanebunt 8 que sunt summa duarum
superscriptarum. quod oportet dividere in ea proportione quam 20 habent ad 12 quare ad
tres 20 et 12 erunt 32 erit ergo sicut 32 ad 12 ita 8 ad super habundantiam medii super
minorem. quare multiplicabo 8 per 12 veniunt 96 que divide per 32 veniunt 3
pro super habundantiam medii super minorem quare si addatur 3 super 12 erit
medius numerus 15. Sunt itaque omnia que diximus inter predictos
tres numeros. sed maior numerus sit ignotus. reliqui duo sunt noti. et quia est
sicut tertius ignotus ad primum notum. ita super habundantia tertii ignoti ad super habundantiam
sedi noti. quare super mutaverimus proportionem erit sicut tertius ad super
habundantiam eius super secundum. ita primus ad super habundantiam secundi super primum. et quia primus et secundus
sunt noti. erit ergo super habundantia noti. proponuntur igitur pro sedo et primo numero. numeros
quales vis. sumpsimus 15 et 12 et tertius numerus sit a.b. de quo auferatur numerus a.
g. qui sit 15 similiter equalis sedo numero. ergo g.b. est super habundantia numeri
a.b. super sedum numerum. demonstrata est proportio numeri a.b. ad g.b. esse ea quam
habet minor numerus 12 ad super habundantiam sedi. s. ad 3 que proportio est in
minimis sicut 4 ad 1 ergo sicut 4 sunt ad 1 ita a.b. ad g.b. quare proportio
a.g. ad g.b. erit sicut 3 ad 1 ergo multiplicabo numerum a.g. similiter 15 per 1
et summa dividenda est per 3 veniunt 5 pro numero g.b. quare totus a.b. similiter
maior numerus est 20. Sit si quidem ipsorum trium numerorum minor ignotus
reliqui duo sunt noti. quare medius sit 15 maior 20 quare super habundantia eius super
sedum est 5 et quia est sicut 20 ad minorem numerum ignotum. ita 5 ad super habundantiam
sedi super primum. quare permutatim erit sicut 20 ad 5 hoc est sicut 4 ad 1 ita
primus ignotus ad super habundantiam sedi. sit itaque sedus numerus d.e. de quo sumatur
numerus d.e. qui sit equalis minori ignoto numero. et quia est sicut 4 ad 1
ita primus ignotus ad super habundantiam sedi. ergo sicut 4 est ad 1 ita d.e. ad e.e.
quare coniunctim erit sicut 5 ad 4 ita d.e. ad e.e. et quia d.e. est 15
multiplicabo per 4 et summa divide per 5 veniunt 12 pro numero d.e. quod cum
sit equalis primo primus erit 12. Modus alius proportionis inter tres numeros

Sunt tres numeri et inequales quorum maior et minor sint noti. s.
[illegible] sit super habundantia medii super minorem ad super

a g b

d f e

super habundantiam

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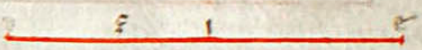
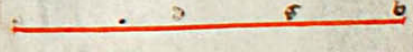
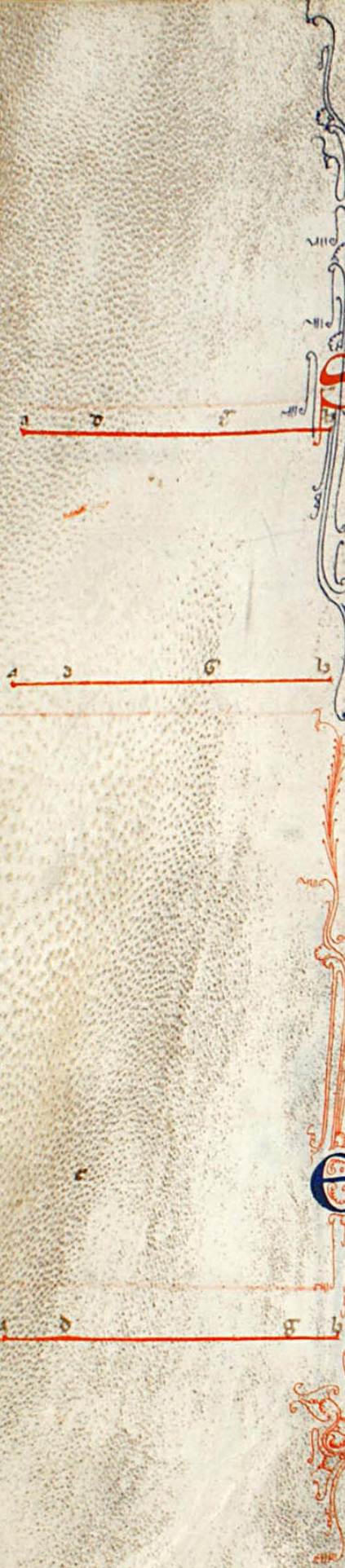




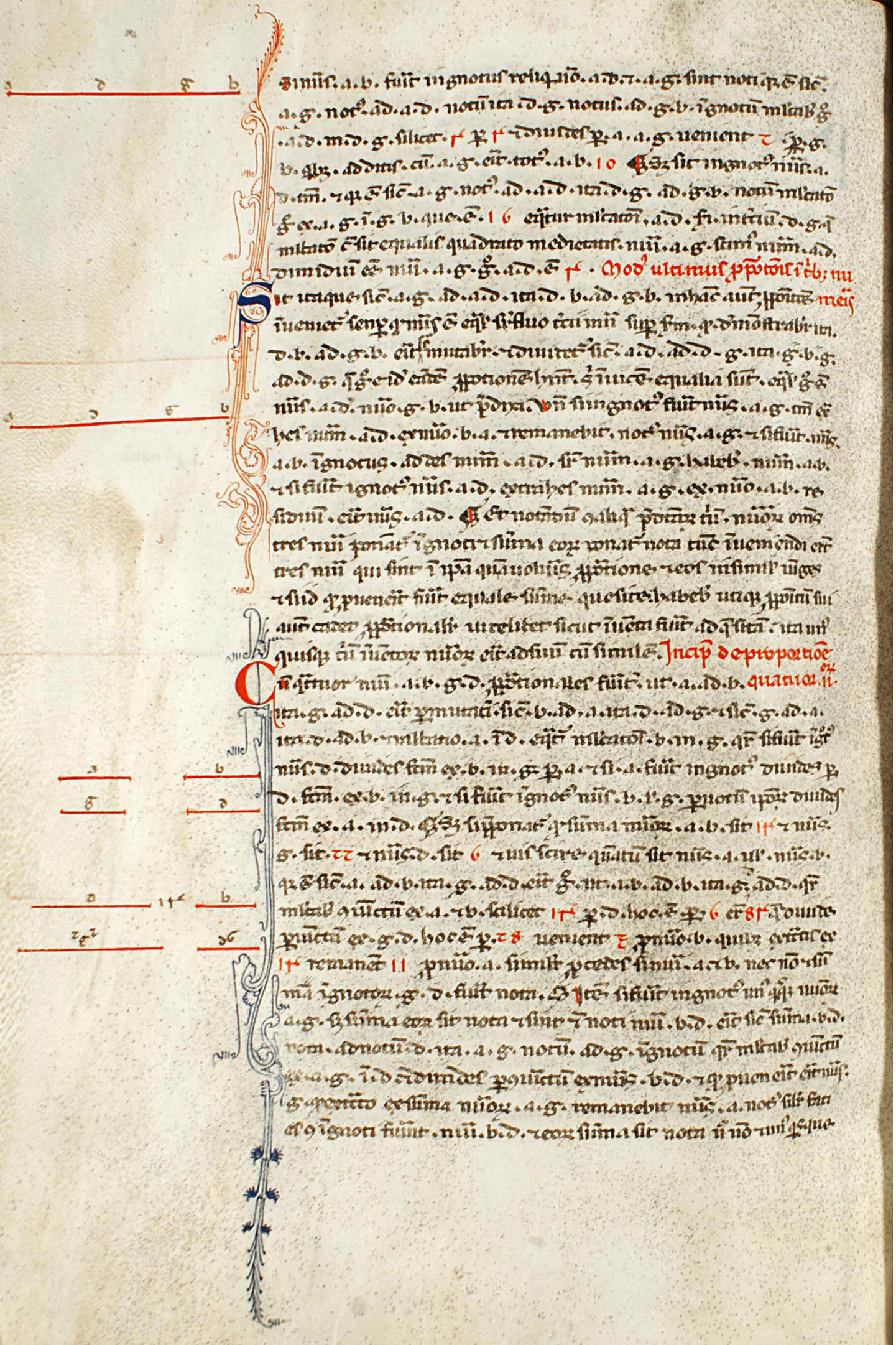


180

ymod' ſr̄ uſt remõſtrauit in mñſ tribz anne ꝓxīs ſequ̇ntibz. Et ſic
ſic̄ b.a. ad g.a. tra d.g. ad g.b. ⁊ ſic ꝑmiſſ ignor̄ mīſ. g.a. ⁊
ſequ̇ntib̄. a.b. ⁊ a.d. ſic̄ nota. q. equlz .a.b. ſit. 12 ⁊ a.d. ſic ⁊ ea
q̄ ſic̄ a.b. ad. a.g. tra d.g. ad g.b. eiſd̄ ꝑmittent̄ ſic̄ a.
g. ad. a.b. tra .b.g. ſd. g.d. ⁊ ea ꝓſſuerūt eiſd̄ ſimiſſ.
a.g. ⁊ a.b. ꝑmittit ad a. b. ſm. tra b.d. tēt ad g.d. q̄rtā mlīa
ad q. a.b. ſm. b.d. tant̄ ē nota. q. ſurgit. q. 12 10 cuj mlīa
tōt ſūma ē 12 0 cui ej mlīa tō quārta q. a.g. ⁊ a.b. m.b.d.
q̄ ſimilō. a.b. addat mīſ. b.e. q̄rta ej mīō. a.g. ⁊ altera q.
mīō. b.e. mīſ. e.f. quelz ej mīō. g.d. remanebit mīſ. f.b.
ej mīō. a.d. q̄ ē ⁊ q̄rta mīſ. a.f.g. ē 15 cui addat ē mīſ. f.e.
duodecīa ꝑ mīſ. a.f. duo ej ſr̄. 1. act. g. mlīa tō. a.e. ī. e.f. q̄ ē
19 ej ꝓto mīī. f.1. q̄ ē 4 ej q̄to mīī. 1.e. q̄rta pars eor̄ q̄ ē 12
ē mīſ. 1.e. d. q̄z ſi altera ꝑs mīſ. f.1. q̄ ē 7 remanebit 6 ꝑmiō.
f.e. z ē ꝑ g.d. cui ſi addat mīſ. a.d. b. a tot. g. ꝑmiō. a.g. ſit
f.a.b. tūc fuit ignot̄ q. erit ſic̄ a.b. ſit. ad g.a. nota tra d.g.
not̄. d.g.b. ignotū q̄ mlīa tō nota. a.g. ī nota d.g. ſi hoc d. 8
ī 6 ej ꝑ mlīa tō. a.b. ſit ī g.b. ignotū duplat̄ g. a.g. in
duo ej ſic̄. e. q̄z mīſ. a.g. duplat̄ ē in duo ej rel addat ē mīſ. g.b.
erit mlīa tō. a.b. ī g.b. cui q̄to mīī. e.g. ej quarto mīī. e.b. ē
cui mlīa tō. a.b. ī g.b. 18 q̄to mīī. e.g. ē 16 quibz mihi
mīſſis reddet 6 18 q̄z tridecīa q̄ ē 8 ē mīſ. e.b. q̄z ſi addat mīſ. e.
a. erit tot mīſ. a.b. 12 Et hic tang mīſ. a.d. ignot̄ relinquō.
a.g. ⁊ a.b. ſic̄ nota. ⁊ q. ē ſic̄ a.b. ad g. tra mīſ. d.g. ad g.b.
erit mlīa tō. a.b. ī g.b. ſilicz 18 ej mlīa tō. a.g. nota ī d.g.
ignotū q̄ duplat̄ 18 ꝑ. a.g. ſilicz ꝑ 8 q̄rtā 6 ꝑmiō d.g.
q̄z q̄rta ē mīō. a.g. remanebit ꝑmiō. a.d. Modus ꝓportionis
Si fuit ſic̄ a.b. ad. a.g. tra ſūma ſilicū dabilium eor̄ ſ. ī tribus mīſ
d.b. ad. g.b. ⁊ ſit ignot̄ mīſ. a.g. ⁊ a.b. ſit 14 ⁊ a.d. ſit 4 q̄
ſūma ſilicū dabilium ꝓpoſit̄ ſ. mīſ. d.b. ē 10 ⁊ q. ē ſic̄ a.b. ad a.g.
tra d.g. ad g.b. erit q. ſimiliter ſic̄ a.b. ad d.b. tra a.g. ad g.b.
q̄ ſi mīſſ erit ſic̄ a.b. d.b. tra a.g. g.b. hoc ē a.b. ad g.b. q.
ē ſic̄ 14 ad 10. tra 14 ſilicz. a.b. ad g.b. ignot̄ ſ. 14 ad 10 ſic
ſic̄ 4 ad 2 q̄ mlīa 14 ꝑ 2 ⁊ duplat̄ 4 ſ. mlīa 28
habet 6 ꝑmiō g.b. q̄z diminut̄ q. mīō. a.b. remanet 9
ꝑmiō a.g. Si ea ſūma mīſ. a.b. fuit ignot̄. q. ē ſic̄ a.b. ad a.g.
tra d.b. ad g.b. erit ⁊ aliquotiēs ſic̄ a.g. ad a.b. tra a.b. ad g.
d. ſi mīſ ea duplat̄ erit ſic ꝑmiſſ a.g. ad ſm. g.b. tra ſcđ. g.b.
duplat̄ g.d. q̄ mīī. a.g. g.b. ⁊ g.d. omnia ꝓportionalia ſūt

quadrūm nūl. a. g. ⁊ tm. no. eoꝝ sūt notꝰ sm̄a exco sic fec
tm no. Modus alius ꝓportionis in tab; numeris

Pone cū ut sic sit a. g. d. ad a tm. b. e. ad g. d. sit mot⁹ p
nūc a. d. ⁊ a. b. reliq; pns. nō. a. g. sic ⁊ q cū. ⁊ q̄ē b. c. g.
pns. ad. a. d. sm̄ tm. b. d. tūr ad g. d. q̄ cū g. ad. d. b.
q̄ mīnūt. a. g. ⁊ g. d. sic. g. 6 nūl. a. b. ad. sic ⁊ q̄ d.
b. ē ꝑ ex hoc. a. d. d. b. uenit 8 q̄ cū mīnūt. g. a. d. g. d.
equal. ⁊ q̄ē nob nūl. a. d. q̄dratū ip̄i medietatꝭ s. | add⁹
cū. g. erūt 9 dec⁹ add⁹ s. d. ⁊ cūbo dimid. a. d. remanēt ⁊
q̄ nūo. g. d. q̄ cū 8 addit nūl. a. hab3 ꝑ q̄ nūo. a. g. q̄ ex
si tūr ignot nūl. a. b. tūr ⁊ calcatꝝ. a. g. not in. g. d. not
q̄ntitatꝭ p. a. d. not ē q̄ cū in nūl. g. d. q̄ē ꝑ cui addat
nūl. a. d. eīt 6 nūl. a. b. q̄ ex simil. d. b. ē sic. a.
g. ad. a. d. tm. b. d. ad. g. d. eīt ⁊ q̄ multiplic sic a. g. p. ad. g. d. tm.
b. d. ad. g. b. qua 1. g. not nūl. q̄ ad. a. g. not s. ꝑ q̄ ex 8 ī g. not.
q̄ equatur multo. g. d. fit. d. o
dī. g. b. q̄ | ⁊ add. ex cū 8 ex 9 q̄drice q̄ | d.
midiū nūl. g. b. habebit ꝑ q̄ d. q̄ auferat nūl.
manebit ⁊ q̄ nūo. a. d. q̄ ꝓ sua nūl. sibi nūl. q̄
q̄ cū ⁊ q̄ nūo. a. d. ⁊ q̄ ⁊ cū ⁊ q̄ nūo. g. d. ⁊ q̄ ⁊ cū
d. g. b. q̄ ⁊ add. ex cū ⁊ q̄ ⁊



Inīōr. a.g. sic notus.

Ne sic sic. a.d. b. ita g. ad d. & sic summa mīōr. b.g. nota. & ns
quisq; cui sit ingnot & sine & noti. mīi. a.d. q̄e. a. sit. 6 & d. sic
9 & summa mīōr. b.g. sit 21 q. fcs ea. a. ēo. sibicet 41 equat fcs
e.b. ī.g. oportet ut duidāt & ndual ptes q̄ru ma mīoris
fiant. 41 & ex quadruo medietat & 21 sibicet & 110 & 41
& tot ēt relidu que & 7 ēdem & 10 remanēt 3 primo ex
mīis. b.g. quīq; ēdē & 21 remanēt 18 p̄ano mīo ēt emisse 6
& 3 & ita 18 ad 9 ul' sic 6 ad 18 ita 3 ad 9 eodēq; modo p̄cedēs &
summa mīōr. a.d. ignotor fuit. noti cū mīis. b.g. p̄cedēt emit ex
hoc talis questio q̄ quidā emit rotulos 6 ne scio p̄ quot big. sup
big. 9 huit rotulos nescio gretē rutrēm. & summa rotulor &
hsanpiox fuit 3 6 dq̄s ēdem sit rotuli 6 & hsima 9 rema
nēt 21 p̄ summa duor ignotor mīor qui ad simulāt mīis. b.g.
Se ita p̄ mīo mīi. a.b. ad mīm. g. sic p̄ mīo. d.e.
ad mīm. g. & sic ignot mīi. a.b. & g. mīi autē. d.e. q. sint noti &
sic noti. supfluī mīi. a.b. sup. g. q̄ sit mīis. a.c. & q̄ minor &
mīis. a.b. q̄ g. minor ēt mīis. d.e. quā q. summāt ita q̄ mīo a c b g
d.e. mīis. f.e. equāt mīo. g. & q̄ sic. a.b. ad g. ita d.e. ad
q. ēt ita q̄ sic. a.b. ad c. b. ita d.e. ad b. e. q̄ si mīus ēt
sic. a.c. not' ad c.b. ignoti ita d.f. notis ad f.e. noti. q̄
mīnb. a.c. p̄mi p. e.f. quarti & mīnd. p. d.f. & p̄ q. e
b. sibicet. g. not' quo addito & a.c. noti ēt not' cū mīis. a.b.
Similr si fuit noti mīi. a.b. & g. mīis. d.e. & q. sint ignoti
& sic noti idem q̄ mīis. d.e. exced' mīm. g. q̄ sit mīis. d.f. adi
q̄ ego & mīo. a.b. mīm. e.b. equāli mīo. g. remanebit
a.c. not' ēt p̄mo. noti. d.f. adi ignoti. f.e. sic. a.c. noti. ad
b. noti q̄ mīnb. d.e. & f.b. & summa minor. p. a.c. & q̄ ēt
ēt mīis. f.e. & sic mīis. c. sup. q̄ si addimus fuit mīis. d.f. ēt
not' mīis. d.e. & Si sint mīnor mīi. a.b. & d.e. & mīis
g.c. sit not' nec mīo fluī. a.b. sup. d.e. & q̄ sic. a.c. q̄ & sic
a.b. ad g. ita d.e. ad c. & q. p̄mutati & ēt sic. a.b. ad e. ita g.
ad c. sic ita mīis. g. 9 & mīis. c. sic 3 & fluī. a.b. sup. d.
e. hoc & a.c. sic 8 & q̄m & sic. g. ad f. ita a.b. ad d.e. ēt &
sic fluī. g. sup. f. 6 ad supfluī. a.b. sup. d.e. sibis ad 8
sic. c. ad mīm. d.e. q̄ minb mīm. c.b. 8 ēt 41 & mīis 6 mīis
ut 41 p mīo. d.e. cui addico. mīis. a.c. & ut 12 & p mīo. a.b. ad
ēt sic 6 ad 8 & ita mīis 8 ad mīm. a.b. q̄ minb 8 & 9 & mīm
ast. 6 nēcnt 12 & sup fluentes mīis. a.c. remanebit 41 & p mīo. a.d.

[illegible] sint [illegible] a.b. [illegible] ignoti [illegible] quisque [illegible] d.e. [illegible]

[illegible] a.b. [illegible] a.c. [illegible] a.b.

[illegible] a.b. [illegible] hoc [illegible] a.b. [illegible]

[illegible] d.e. [illegible] quadrat[illegible]

[illegible] quadrat[illegible]

[illegible] a.c. [illegible] a.b. [illegible]

[illegible] a.c. [illegible] a.b. [illegible]

[illegible] 9 [illegible] 4

[illegible] a.c. [illegible] a.c. [illegible] 9 [illegible] 4 56 [illegible]

[illegible] 7 [illegible] remanebit [illegible] 3 [illegible]

[illegible] 9 [illegible] 12 [illegible] a.b.

[illegible] a.b. [illegible] a.b. 225

[illegible] 4 [illegible] 3 [illegible] 4 [illegible] 3 [illegible] 16

[illegible] 9 [illegible] 25 [illegible] 9 [illegible] 225 [illegible]

[illegible] 9 [illegible] 225 [illegible] 25 [illegible] 81 [illegible] b.e. 9

[illegible] colliges [illegible] quatuor [illegible]

[illegible] Explicit pars

Prima ultimi capituli Incipit secunda de quibus geometrie pertinentibus

[illegible] 12 [illegible]

[illegible] 12 [illegible]

[illegible] 400 [illegible]

[illegible] 144 [illegible] 400 [illegible] 256

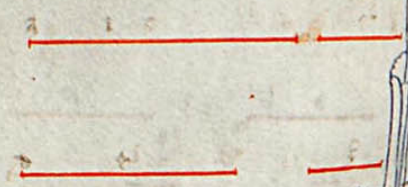
[illegible] 16 [illegible] 4 [illegible]

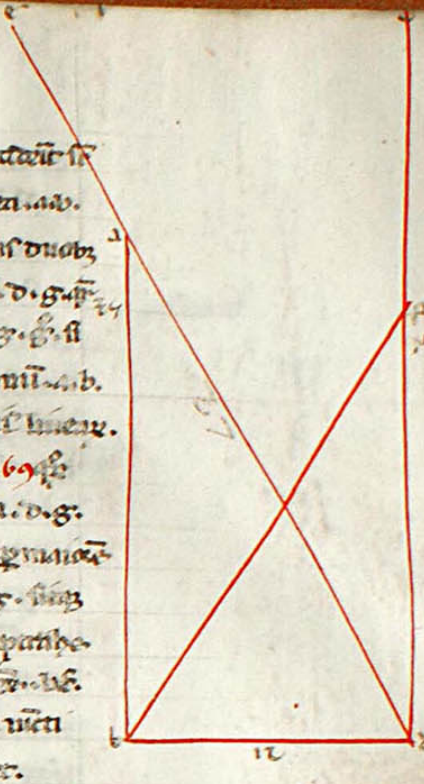
[illegible] 4 [illegible] 16 [illegible]

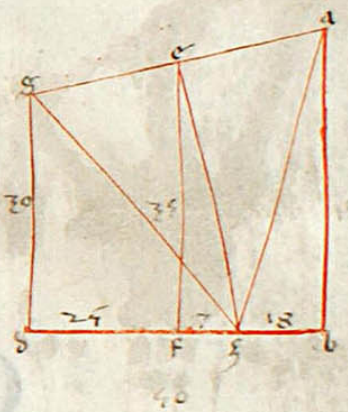
[illegible] 256 [illegible] 400 [illegible] 144

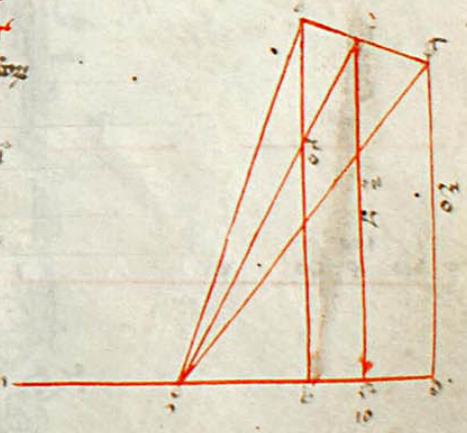
[illegible] 256 [illegible] 144 [illegible] 400 [illegible] 20

[illegible] 12 [illegible]



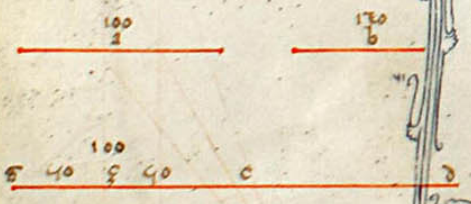






ex minore turri quinenies eodem modo ubi gratia sit spatium b.d. quod est
distantia turrium 10 et turres sint eedem ut hac alia cernitur formula et pro
trahatur linea d.b. in infinitum super punctum l et a puncto e. protrahatur linea
e.f. non non et linea e.g. faciens angulos rectos super lineam a.g. quare ostendentur
ex his que diximus linee g.a. et g.g. aut in uice esse equales. nam si prescripta 175
diuisis per spatium d.f. quod est 5 minus 35 uenient per spatio f.g. quare cen
trum g. distat a pede minoris turris s. a puncto d. passibus 50 ex quibus si
extrahatur spatium d.b. scilicet 10 remanebunt 30 per spatio b.g. quare extra
maiorem turrim et nota quod est superlinea d.a. protrahetur in plano linea ab
utraque parte in infinitum per punctum g. secans ipsam ad rectos angulos. tunc in qua
cumque parte ipsius linee uelles. possit esse centrum predicte fontis. Et si a cen
tro fontis due aues in simili discesserint et per aliam uolatu super altitudines
duarum turrium ab utrumque parte fontis existentium uno et eodem momento de
uenerint et uis scire utriusque turris altitudinem et sit centrum predictum
longe a minori turri passibus 32 a maiori passibus 18 sic facies quadratum
minoris spatii de quadrato maioris esse s. 325 de 1025 remanebunt 700 que
[illegible] et per altitudinem minoris turris ad libitum sicque 30 super quod quadratum
[illegible] 700 fuerat erit 1600 quod radix s. 50 erit altitudo maioris turris.
Et si proponatur quod maior turris altior minore passibus 8 dimidium de 8
fuerat et ad de in simili distantias centri a turribus s. 18 et 32 erit 50 quod dimi
dium s. 25 extrahende 32 remanent 7 que multiplicata per eadem 25 erit 175 que diuide
per 5 fuerat exibunt $\frac{3}{5}$ 35 per lineam e.f. super que ad de 5 erit $\frac{3}{5}$ 57 per alti
tudine maioris turris. de quibus extractis 8 in quibus ipsa excedit minorem
remanebunt $\frac{3}{5}$ 29 per minori turri.

Quidam habuit lib 100 de quibus lucratus est in quodam foro aliquid. ex quibus omnibus lucratus
est in alio foro proportionaliter secundum quod lucratus fuerat in primo foro et habuit lib 200
pone a. pro libris 100 et b. pro eo quod habuit inter capitale et lucrum in primo foro.
et g. sit 200 quod est sicut a. ad b. ita b. ad g. erit multiplicatio a. in g. equalis
quadrato numeri b. ergo multiplicabis 100 per 200 erit 20000 quod radix que est circa
lib 141 et solis 8 et dimidium $\frac{1}{8}$ 5 est numerus b. de quibus auferantur lib 100 capitalis re
manebunt lib 41.



Rursus quidam habuit lib 100 cum quibus fecit unum uiadium et lucratus est nescio quot.
et tunc accepit alias lib 100 in societate et cum his omnibus lucratus est eadem ratione qua
lucratus fuerat in primo uiagio et sic habuit lib 299 quaeritur quot lucratus fuit sit a.
100 de quibus facit numerum b. in primo uiagio super quem addantur lib 100 societatis.
et proueniat quantitas g.c.d. de qua g.c. sit 100 et ex quantitate g.c.d.
facit in secundo uiagio lib 299 que sint numerus e. et diuidatur g.c. in duo equa
sunt g. et quod est sicut a. ad b. ita g.d. ad e. erit multiplicatio ex b. in g.d.
equalis multiplicationi ex b. a. in e. sed multiplicatio a. in e. scilicet de 100 in 299 est 29900

qz est mlcand. qr. bā. g. d. ꝫ. c. d. & est⁹ v. cir. g. mlcand.
g. d. ī. c. d. t 9900 quibz si addat q̄dē nūm. g. c. s. t 400 er̄ t 10400
q̄ radix. £180 & nūs. g. d. equibz sūt remⁱ 40. ſ. g. c. rema
nebūt 120 primo. c. d. ꝫ. c. d. & est v. g. v. & 120 q̄ sunt capti
de ⁊ ducāt p̄mi magni. d quibz lib 100 capiat. remanēt lib 20
p̄ue. g. cēt lib 100 ducāt sunt 20 cētesima pars q̄. s. sol 6 ducāt
sunt p̄ncipū. ī uno ꝫ magio. & ſ cū q̄nde hūt lib 100 dabz ⁊
d eou p̄ncipio ducāt & sēp equali. cētz forīc ⁊ infine hūt lib 200 q̄ ſ
& ī uno ꝫ hūt foro ꝫ intelligīt ſtuor. nūi ḡmu. ꝓportionaliter e
quos p̄mi ⁊ q̄rt⁹ sūt noīa. s. lib 100 ⁊ lib 200 reliquos oppet nos ī
uenire. & q̄m ut euclides dic ī t̄ duos cubos mōs duo medi
nie cad nūi ḡmiam q̄ps ī p̄pōne ḡmia rō cubicē 100 er̄
1000000 ſ. ꝓpōnis. & ad cubū drīoꝝ p̄mi fori sic p̄mⁱ nūs ad q̄tū
ut euclides ostendit. & q. q̄dē nūs. s. t 200 & duplū p̄mi. du
plica 1000000 er̄ t 2000000 q̄ cubo drīoꝝ p̄mi fori q̄z ⁊ duplica
tū sūmū p 2000000 q̄ cubo drīoꝝ sēdi fori q̄nq; duplicatus sūmū
8000000 s. cubū ducātoꝝ librar q̄ scīpe hūt ultimo foro. g. repi
at radicē cubicā nūoꝝ p̄mi ⁊ sh. sūt ⁊ h. ateb quelibet sui q̄dra
tē q̄ p̄ nūi radicē cubicā nō hāt ſ ſ p̄mⁱ nūs esse ultimⁱ
ēt cubi ut habetur p̄pōne. inē se sic cubz nūs. ad cubū nūi
cui ī t̄ accrēt nūs 2 duo nūi rōnati ⁊ vi q̄n ſ p̄mⁱ nūs t 2
q̄rt⁹ nō sic 81 q̄z p̄pōne & sic cubz 8 ad cubū 27 nūi sūmⁱ nūeros
nūoꝝ ī tredēt accipe radicē cubicā ei⁹ q̄ 27 ē 3 ⁊ 3 ſ q̄z p̄pōne ca
dūt nūi inē cubos q̄z ē triplū p̄mi. nūi dūdet p̄ 3 ut dimidū
ad q̄dē 1 ½ triplicat uenit 3 ½ p̄ nūo. q̄z dūmdio uice triplica
tū ad idem ēt p̄ctio nūo 4½ q̄ 4 dūmdio uice triplicato p̄ueit &
q̄rt⁹ nūs 81 ut uolebam. ⁊ notād q. q̄m ī simlibz ī t̄ p̄mū
nūm ⁊ ultimū. s. nec capitale ⁊ d q̄ hūt infine sūt oꝝ magioꝝ.
ut nec cēdo nec. ut ī duobz foric. nec p̄pōtio ut p̄ eū nūoꝝ dr
& duplicata nec ꝫ h ultimⁱ nūs ad p̄mū nūm. hoc & sic ul
timⁱ nūs ut quadrus sēdi nūi & ad q̄dū p̄mi. ⁊ q̄dē ultimi. ad
sēdi ſ. ⁊ q̄dē duplicati q. q̄dē nūs ſgit ex duobz nūis eq̄libz ⁊
duo ī tercedūt nec ut p̄ctio nūoꝝ p̄pōtio dr & ē triplicata ſ
& sic ultimⁱ & ad p̄mū ut p̄mⁱ sēdi ad cubū p̄mi ⁊ cubz tūi ad
cubū ſ. ⁊ cubz ultimⁱ ad cubū tūi ⁊ q̄dē triplicati q. ſ cubz nūi
ſgit ex tribz eq̄libz nūis. ut 8 q̄ nūi ex tribz binarijs ⁊ ē tres
nec cadē nūi ut ī q̄dratis sūt nūi ꝫ p̄ctio ut p̄ q̄ nūoꝝ
nūoꝝ & ē q̄ triplicata. hō sic p̄pōtio q̄m ad p̄mū ut q̄dē q̄dē
unⁱ cuiꝰ sequit̄ & ad q̄tū q̄dē sūt nec cēt. ⁊ q̄dē q̄plicata

ad p̄mū

nūi

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[illegible] 10 [illegible] 9 [illegible] 5 [illegible]
[illegible] minorem numerum s. 1 [illegible] 4 [illegible]

Inveniuntur hec [illegible] ex supra scriptis [illegible] in duas [illegible] partes [illegible] in duas inequales [illegible] minoris partis [illegible] cum quadrato numeri qui est a minori parte usque ad medietatem totius numeri [illegible] medietatis. [illegible] partes numeri [illegible] proportionem [illegible] ad quadratum numeri [illegible] 8 [illegible] 18 [illegible] proportio est sicut 4 ad 9 [illegible] 26 [illegible] 15 [illegible] 26 [illegible] in duas partes [illegible] 8 [illegible] 18 [illegible] 5 [illegible] 15 [illegible] 8 [illegible] 18 [illegible] 8 [illegible] 15 [illegible] 15 [illegible] 8 [illegible] 18 [illegible] 144 [illegible] 15 [illegible] 24 [illegible] 169 [illegible] 15 [illegible] 1 [illegible] 5 [illegible] 4 [illegible] 9 [illegible] 4 [illegible] 9 [illegible] 47 [illegible] 24 [illegible] 476 [illegible] 24 [illegible] 49 [illegible] 7 [illegible] 624 [illegible] 24 [illegible]

De inventione duarum radicum quarum multiplicationes faciant 24.

Sed [illegible] 9 [illegible] 16 [illegible] 24 [illegible] 24 [illegible] 4 [illegible] 4 [illegible] 12 [illegible] 4 [illegible] 12 [illegible] 144 [illegible] 169 [illegible] 15 [illegible] 24 [illegible] 4 [illegible] 12 [illegible] 60 [illegible] 15 [illegible] 4 [illegible] 4 [illegible] 24 [illegible] 15 [illegible] 1 [illegible] 12 [illegible] 1 [illegible] 12 [illegible] 1 [illegible] 24 [illegible] 24 [illegible] 27 [illegible] 27 [illegible] 46 [illegible] 61 [illegible] 61

[illegible]

De inuenire duas radices que mlcantes faciat ꝙ1.

Ite ꝙ unces ꝙ. faciūt 16 ⁊ 4 unces 4 faciūt ⁊4 ꝙ insimul faciūt ꝙ1
⁊ quere ut inueniat alias duas radices. que quadratu faciat simꝫ
ꝙ1 Inueniam quidē duo quilibet nūi que mlcantes unite faciūt
qlibet nūm hītē radicē. sitq; ⁊ ⁊ ꝙ que mlcationes unite faci
unt hītē radicē. silicz ⁊4 cui radice uidelicet 4 milies quarte
radicis, pmisse. s. ꝙ ꝙ ⁊ ꝙ 4 erunt 10 ⁊ ⁊4 diuisa milies 10 ꝙ 10 etꝫ
ꝙ00 et ⁊4 ꝙ ⁊4 erūt 64 ꝙ insimul unces faciūt 10 ⁊ 4 ul milies ⁊4 ꝙ ꝙ1
⁊ est similis 10 ⁊ 4. Inquibꝰ duas duas radices potes reperē nisi
nisi preter 10 ⁊ ⁊4 que faciūt 10 ⁊ 4 quas inuenies sic pone
radicē qſter ⁊4 una sub alia. in quasꝫ pmissa est que fecerit ꝙ1 ut
hoc docet mlcatio ⁊ ꝙ ꝙ que est cui ipa ⁊ ⁊ ꝙ fiunt una extendatur de
⁊4 ꝙ ꝙ 4 qſ sunt ante ipa ⁊ habebis 1⁊ ⁊ 10 que duab exparte. duū
mlcatū radicē expposito. s. ⁊ ꝙ 4 ⁊ ꝙ ꝙ est 14 ⁊ 16 q addes in
simul est ꝙ1 ⁊ erunt 16 de 10 remanēt 8 ⁊ sic habes ꝙ quelibet
duarū radicū ꝙ1 ⁊ 8 que mlcationes insimul unctę. s. 96 ⁊ 64
faciūt 10 ⁊ 4 qſ diuidendū est in ueras suas radices ⁊ ꝙ1 ⁊ 8 ꝙ 4
q mlcata sibi ꝙdras radicē uidelicet ꝙ ꝙ ⁊ ꝙ 4 erunt 64 ⁊ 64
⁊ ꝙ 1 que mlcatio si insimul addeis faciūt ꝙ1 sunt enī 10 ⁊ 4 alie
due radicē que mlcatę insimul unctę faciūt utiq; 10 ⁊ 4 que re
ꝙuūt exppositis. unū. duabꝰ suis sic adde 1⁊ et 10 ⁊ habebis 14 de 16
et exibuntur ꝙpis radicibꝰ ⁊ ⁊ 1 quarū 4 diuisis reddet ⁊ 6
⁊ ꝙ quod quidem facit utiq; ꝙ1 possum enī q mlcatę due
alioꝝ duoꝝ minimū addere ꝙ1 ꝙuenire. uidelicet si accepero duos
alios duos nūos ꝑter ⁊ ꝙ que mlcationes unctę insimul faciūt
ainī num hītē radicē ut 4 ⁊ 1⁊ q faciūt alium num hītē radicē
uidelicet 169 q̄ cui radicē uidelicet 13 ⁊ ⁊ ꝙ ꝙ1 ⁊ ⁊ ꝙ 4 que mlcationes insimul unctę faciūt silē ꝙ1
Nam ut hoc inuentū ꝓducit. geometrā demonstrat sic. Sit circulus
qui describatur cū puncto. ☉ petra pānū ex q̄ qda uoluit facē lineamū
nidā. sit petra una pmi q̄s longa habēs 100 ⁊ ampla ulnas 30
ex manu uiri facē hutheammā. que sit. qꝫ sit ulongitudine
ulnas 1⁊ ⁊ ulatitudine ulnas 4 Quere q̄s hutheammā in
facē pōt. Multiplica ulnas latitudinē petre ꝙpis longitudinē ul
delicet 30 ꝙ 100 erūt 300 que diuide ꝙ longitudinē ⁊ latitudinē
hutheammā uidelicet ⁊ ꝙ 1⁊ hoc est ꝙ 10/6 erūt hutheamma. ☉ archa ꝑtita plena frumēto.

Quidā recepit mutuo ꝙdā archā plenā frumēto q diuit in singlis
lateribꝰ uidelicet ⁊ latitudine. ⁊ altitudine. ⁊ altitudine palmos
16 accidit nempe q ipa archa fuit igne cōbusta. ⁊ sic q̄ pōt

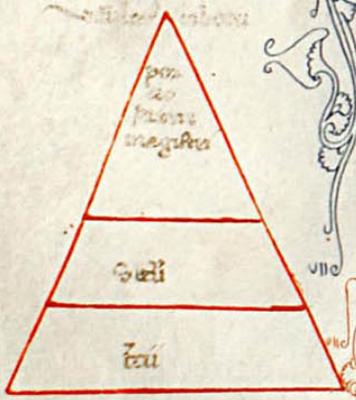
frumtū ꝙ ipā archa redde. quo ꝙ cū uenirē ut rederet frumtū
suo ꝑtatori. aut. habeo archā q̄ ly⁹ insingl̄is lateribꝫ ꝑlmos ꝫ
tolle cū ea tuū frumtū. quēlīb⁹ quot archas frumti eis redde deleat.
mlīab⁹ uicis latitudīne maiōis arche ꝓlongitudīne ipi⁹ audeliter 16
ꝑ 16 erūt 256 que mlīa ꝑlatitudīne uidel' ꝑ 16 erūt 4096 q̄ diuidat ꝑ
6 ꝫ que exit exmlīatē latꝰ minōis arce uidelicet de ꝫ ī ꝫ q̄
ī ꝫ erūb arce 6 ꝫ ul' alit diuide lat' maiōis arce ꝓlat' minōis
uidelicet 16 ꝑ ꝫ exit ꝫ que cubica ē simil' arce 6 ꝫ ut ꝑdi
cim'. Si aut aliqua ꝑsēptaū archaū ī equalia bret latera. ꝓpt
regl'e nō obstaret. q̄ sēp mlīa dā ē latitudo ꝓlongitudīne ꝫ altitu
dīne maiōis arce ꝫ tūc diuide ipam summā ꝓlatitudīne ꝫ lōgi
tudīne ꝫ altitudīne minōis. De cisterna plena aq̄ ī q̄ eiat lapis tetꝝgōis

Si cisterna plena q̄ ī tenet milles 1000 erūt ī latitudīne pedes 10
ī longitudīne pedes 15 ꝫ ī altitudīne pedes 20 Quēlīb⁹ lapis
ī ea lapis quadr' habz in singl̄is lateribꝫ pedes 6 q̄nta aqua m exit
ēt. mlīab⁹ uicis cisterne latitudīne. ꝓlongitudīne. s. 10 ꝑ 15 erūt 150
q̄ mlia ꝑlatitudīne uidelicet ꝑ 20 erūt parca totī cisterne pedes
q̄dā 1500. s. hui⁹ mlia tumū latitudīne ꝫ lōgitudīne ꝫ altitu
dīne lapidis. s. 6 ꝑ 6 q̄ ꝑ 6 erūt 216 s. totū parcha ipi⁹ lapidis. Ci
ꝯtionali ꝫ sic 216 ad 1500 ita barilles eiaculatōis ad milles 1000
Cū mlia 216 ꝑ 1000 erūt 1600 que diuide ꝑ 1500 exibēt 14 ꝫ tot
uidel' aq̄ exibēt tota cisterna ꝓpō lapide. De alterna ī qua eiacꝰ ꝯlūpna

Si fūma fūma suppsēpta eiaculi ꝯlūpna q̄ sit lōga pedibꝫ 10 ꝫ sit
latitudo pedū 10 sic sit. Inuenies fūmā 1500 q̄ fūma pedū totī
altūe. deīn inuenies diametrū ꝯlūpne que ꝓgeometri ē inuenies.
uidel' q̄ diuidet circuli ꝯlūpne uidelicet 32 ꝑ 7/22 exibēt ꝓdu
ctus pedes 7 q̄drantū q̄ē 1/2 7 mlia ꝓdimidiū circuli uidel'
ꝑ 11 erūt 1/2 78 q̄ē area circuli ꝯlūpne. q̄m mlia ꝓlongitudīne ꝯlūp
ne uidel' ꝑ 10 erūt parca totīlūpne pedes q̄dā 784 q̄ mlia ꝓbarilles
1000 erūt 784000 q̄ diuide ꝑ 1500 exibēt 523 1/3 tot barilles aque
exiet tota cisterna ꝓ ꝯlūpna illa.

Si uolūt fūm cisternā cuiꝰ lapis ꝓhāt formā ꝓmissā circuli ꝯ
hoc ē q̄ imbuli sit ut pes ꝯlūpne rotūde. minuat ipi rotūditas
semꝑ minuendo ꝰsq; ad altitudīnē hōc ad michi redigat. ꝫ sit
circuli basis pedū 32 ꝫ ipi⁹ altitudīnē hāt pedes 16 Inuenies si
quid diametrū ipi⁹ basis. hoc ē q̄ diuidat 32 ꝑ 7/22 exibēt 7 ꝫ
diametro ipi⁹ cui⁹ dimidiū uidelicet 1/2 7 mlīab⁹ ꝓdimidiū circuli.
ꝑ 11 erūt 1/2 78 q̄ē area basis. deīn inuenies diametrū altitudīnis pri
midis q̄ sic inuenies. ab mlīab⁹ 18 ꝑ 18 erūt 324 q̄ q̄dā ꝯbo. mlīaꝫ

dimidii diametri circuli videlicet $\frac{1}{2}$ 5 ise. quod multiplicatio est $\frac{1}{4}$ 12 re-
manebit $\frac{5}{4}$ 511 quorum radix que est parum diminutio amplius $\frac{12}{17}$ 17
erit perpendicularis videlicet diametrum altitudinis ipsius. Cuius tertia pars que
est $\frac{14}{17}$ 4 multiplicata per $\frac{1}{2}$ 58 erit pedes $\frac{8}{17}$ 226 et tanta erit archa totius piramidis que
multiplicata per bariles 1000 et divide per archam cisterne videlicet per 14400 exibunt bariles
$\frac{0\ 2\ 5\ 12}{2\ 8\ 9\ 17}$ 14 De cisterna in qua eiciatur lapis ex utraque parte piramidatus
Iste lineam cisterna eiciatur lapis qui habet formam fusi quod quando filant mulieres
in duo redit piramides similes ferro piramidi et quod ponatur in ventre scilicet in sec-
tione piramidum circuitus pedibus 44 et in longitudine habet exterius pedes 26
in venis itaque aream piramidis per statum regulam et addes eas in unum erunt
pedes $\frac{2}{3}$ 1124 quos multiplicabis per bariles 1000 et divides per 14400 exibunt bariles
$\frac{1\ 4\ 0}{2\ 6\ 9}$ 78 De cisterna in qua eiciatur spera rotunda
Ad hunc si in ista cisterna eiciatur forma rotunda. Ipsius circuitus sint pe-
des 44 ut venies diametrum ipsius scilicet quod divides 44 per $\frac{1}{7}$ 5 exibunt per dia-
metro ipsius pedes 14 que multiplicata per sextam partem ipsius videlicet per $\frac{1}{3}$ 2 erit $\frac{2}{3}$ 22
que multiplicata per 44 erit 1427 et tot pedes quadrati continet istam formam. Quos mul-
tiplicabis per bariles 1000 et divide per 14400 exibunt $\frac{1\ 7}{3}$ 99 et tot bariles exi-
erunt de cisterna proiectione illius formae. Possumus enim in istam cisternam varias
lapidis formas eicere ut pote triangulatas quadratas pentagulatas
et planum latera habentes seu obliquas quas relinquimus demonstrare his qui
geometriam ignorant. De trigonali ciborio picto a tribus magistris
Quidam construxit palatium et protecto sui talami ciborium ex iiii. trigonis
constituit. Quorum unum quodque latus habebat in altitudine palmos 56 et
in eorum base palmos 50 quod ciborium tribus magistris dedit ad pingendum. Quorum
primus pinxit suam portionem videlicet tertiam partem incipiendo ad puncta
illius ciborii finiendo ad equi distantem lineam circiter cum base trigonorum. Secundus
suam tertiam partem post primum circiter pingere studuit. Tertius vero pinxit resi-
duum. Quaeritur quantum unusquisque ex ascendentibus lineis trigonorum pingit cum
unusquisque ipsorum tantum tertiam partem ciborii pinxisse proponatur. Mensuram quidem
basis in hoc quod vel facere scias. Mensuram vero linearum ascendentium a base
usque ad puncta ciborii videlicet 56 in se ipsa multiplicata erit 1296 et radicem
tertie partis ipsius videlicet 432 subtiliter invenire studeas. Iam ipsa erit portio
quam primus ex ipsis lineis a puncta inferius descendendo depinxit. Similiter sed $\frac{2}{3}$
de 1296 sed 864 radicem subtiliter accepis terminum sive magistri ab eadem
puncta inferius descendendo reperies. Residuum vero pinxit tertius ut in sub-
iecta figura ostenditur. Unde manifestum est quod ex quacumque parte desuper scriptis
1296 radicem accepis. Dabit punctum seu terminum tertie partis sui ci-
borii a puncta incipiendo et inferius videndo ut supra demonstravimus.
Si tres numeri ex quibus medietas primi est tertia pars secundi et quarta pars sive quinta



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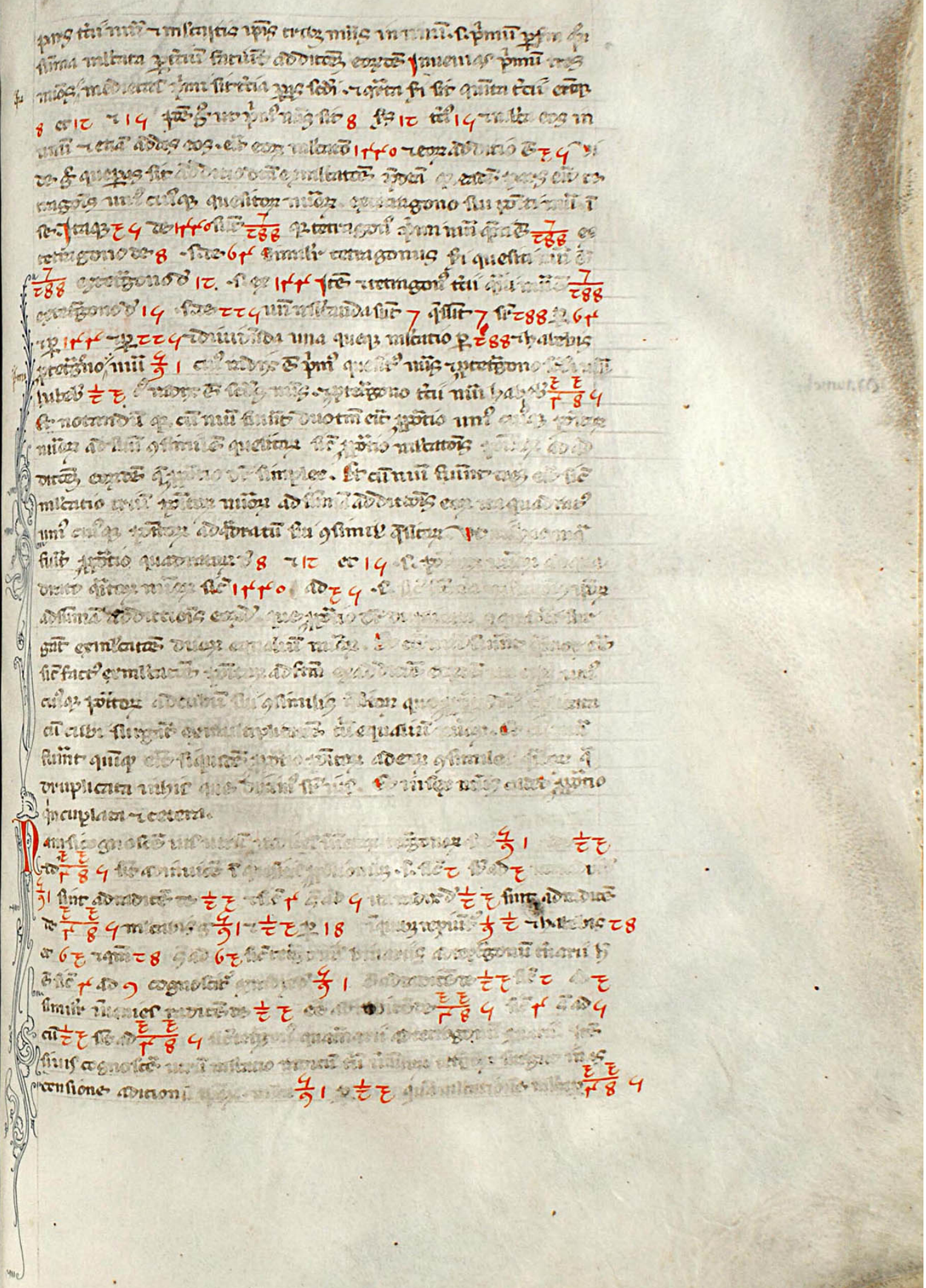

et $\frac{576}{489}$ 29 cuius numeri radix est summa multiplicationis radicum trium tetragonorum
dictorum. Item ut habeas iunctionem ipsarum iunge tres numeros in numeros superius inquisitis
proportionibus scilicet 8 et 12 et 14 erunt 54 et accipe tetragonum primi numeri scilicet
64 et tetragonum de 54 scilicet 1224 quia in qua proportione est tetragonus primi
positi numeri ad tetragonum iunctionis trium positorum numerorum ita primus numerus
tetragonus est ad tetragonum iunctionis radicum trium inventorum tetragonorum. Hec est
sicut 64 sunt ad 1224 ita $\frac{4}{9}$ 1 est ad tetragonum summe iunctionis trium radicum
superscriptarum. Quare multiplicanda sunt 1224 per $\frac{4}{9}$ 1 et dividenda multiplicatio
eorum per 64 et invenies similiter $\frac{576}{489}$ 29 pro tetragono iunctionis trium predictarum ra-
dicum possumus multas varias questiones de similibus in tribus numeris vel
in pluribus proportionibus secundum quod in duorum numerorum questionibus superius fecimus quarum omnium
solutiones per ea que dicta sunt satis aperte invenire possunt. Incipit pars
tertia de solutione quarundam questionum secundum modum algebre et almu-
chabale scilicet ad proponendum restaurationem

Maumeht

Ad compositionem quidem algebre et almuchabale tres
proprietates que sunt in quolibet numero consideramus que sunt radix quadratus et numerus
simplex. Cum itaque aliquis numerus multiplicatur in se et producit aliquid. Sunt
factus ex multiplicatione quadratus est multiplicatus et multiplicatus in quantitate est radix.
Ut cum multiplicatur 2 in se veniunt 9. Sunt enim 2 radix de 9 et 9 est quadratus
ternarii. Et cum numerus non habet respectum ad quantitatem vel radicem tunc simpliciter
numerus appellatur. Hec autem in solutionibus questionum inter se equantur sex
modis [illegible] simplices compositi. Primus [illegible] modus est
quando quadratus [illegible] equatur radicibus. Secundus quando census
equatur numero [illegible] radix equatur numero. Unde cum [illegible] in
veniunt [illegible] census equari radicibus vel numero [illegible]
[illegible] census [illegible] in numero censuum.
Ubi gratia [illegible] radicibus [illegible] radices [illegible] census.
scilicet 10 per 2 [illegible] radices 4 [illegible] radix census [illegible]
est 4 [illegible] 24 [illegible] radices [illegible] unitates sunt
in radicem census. Item [illegible] census [illegible] 12 [illegible] pars
[illegible] census equatur [illegible] 12 [illegible] census equatur [illegible]
[illegible] radicibus. [illegible] 4 [illegible] 16. [illegible] $\frac{1}{2}$ 2
[illegible] 21 [illegible] 21 per $\frac{1}{2}$ 2 [illegible] census equatur
radicibus 6. Et si $\frac{1}{2}$ unius census equatur 4 radicibus [illegible] 4 per $\frac{1}{2}$
[illegible] 4 per 2 [illegible] 1 [illegible]
[illegible] 10. Ergo unus census equatur 10 radicibus. Et si $\frac{2}{3}$ unius census equatur
8 radicibus [illegible] census equatur radicibus 12 [illegible] 8 per $\frac{2}{3}$ veniunt 12
[illegible] census [illegible] alicui numero.
[illegible] 4 census equatur [illegible] 4 [illegible] 4 per
4 veniunt [illegible] 9 [illegible] 9 [illegible] 2

et ts

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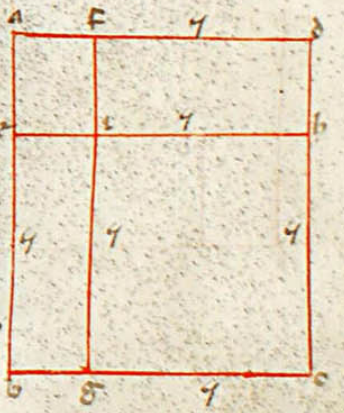
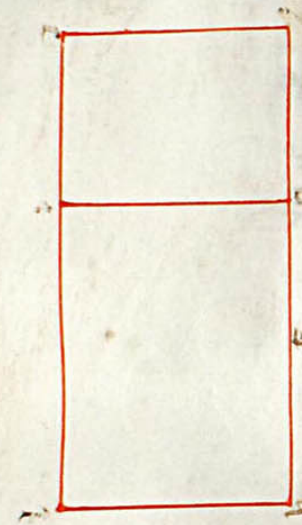
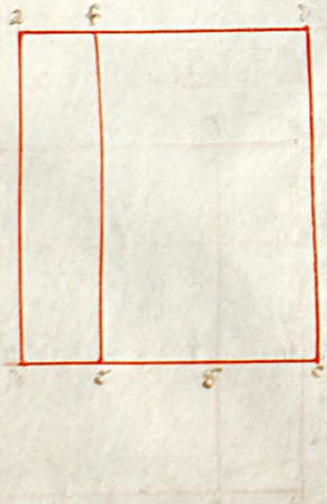
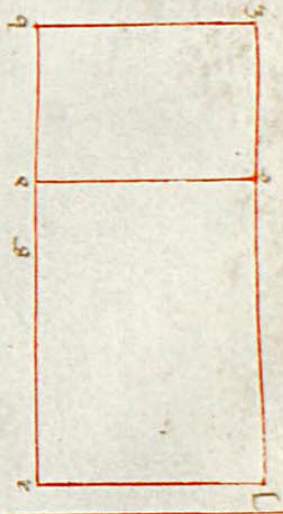
simul cū cēlus ½ ℈ equat drās 26 dnicet 26 p ½ ℈ .s. 78 p 12
evnit 6 quor ℈ unī cēlus. Q̄r radix ei⁹ surdi ē sit radix nūi nō
quadrati. ℈ ē ½ ℈ unī cēl⁹ ℈ drās 12 cēcēl⁹ ℈ ½ drās 16 q̄ drā
nūi 12 p ½ ℈ .s. 78 p ℈ uenient 16. Q̄r radix census ē ℈ silr
si nel ē radicel. ul' partes unī radicis ℈ sūr nūo. hic aūt ostēdē
reliquos tres modos expositos cens⁹ primū ē modi ē q̄ducto ad
q̄s radicel ℈ nūi. ē dē quādo radicel nūi ℈ ad census. cū
modus ē q̄n census nūi ℈ equant radicib⁹. Vn cū tribus questio-
nibus cens⁹ augmētat⁹ ul' diminut⁹ ei⁹ oportet radicē nūi. re-
omnia reducenda ad census unū. Vbi grā duo census recte radi
cel ℈ drās 20 sīgo unī census 4 radicel ℈ drās 14 sim
ili quoq; modo si fuerit cens⁹ et 12 radicel ℈ drās 29 duplet
hoīs ynūm census. s. p ℈ pueīt unī cēlus 4 quatuor radicel ℈
℈ drās 12 ℈ sūmentiāt radicel 14 ro 60 q̄ ℈ census
4 dnicet hoīs ynūm census. s. p 4 reperiet q̄n cēl⁹ ℈
ibus radicib⁹ retenarius 12 ℈ si ½ 4 unī census radicel 10 ℈
dr̄o dnicet hoīs p ½ 4 .s. m'cab radicel 10 ro 20 p 4 erūt
radicel 40 ro 100 q̄ dnicet p ℈ sic ūnietur q̄n census 4
radicel ½ 12 ℈ drās 24 sic intelligas in similib⁹ ℈ hoīs
q̄n si nolueris uolueris ℈ cēs q̄ntūcūq; cens⁹ q̄ cū dnō radi
cib⁹ ℈ drās nūo dno. sic facias ac quādocūq; medietas radic
addēda ē sup nūm datū 4 q̄ pueīt radicē accipe d̄ nūm
medietatis radicē rotte 4 q̄ remanserit erit radix q̄sīti cens⁹. Vbi grā
cēl⁹ 4 radicel ℈ drās 24 dimidiū trāq; q̄dratiz ē 4 q̄d
ē. m'cabitis futurū 24 q̄d additus ē 29 fit 53 d̄q̄ radice q̄ē 8
si auferatur medietas radic. s. 4 remanebit 2 p̄dicte q̄sīti cē
sus. Q̄r cens⁹ ē 4 ripi recte radicel sūt 20 sic cēl⁹ recte radi
cel ℈ drās 29 Nam in hregib⁹ p̄cedit p̄positū figurā ostendē
pauito. aducatur siquidē tetragonū .a.b.c.d. hūs insinglis la
teribus ampli q̄libet 4 accipiat⁹ sup lat⁹ .a.b. pūcte e. sit lat⁹
a.d. pūctus f. sit lat⁹ b.c. pūct⁹ g. sit lat⁹ c.d. pūct⁹ h. 4
sic uni quoq; rector .b.e.e. g. .c.h. .d.f. ulnaz 4 recō
plens recte .e.h. .f.g. q̄z tetragonū ē quadri latez .a.c.
ēt lat⁹ .d.a. ēq̄l lateri .b.a. 4 cū reflualib⁹ equalia auferēt ℈
remanet erit equalia q̄ si ce.d.a. auferat .d.f. 4 ce.b.a. aufe-
rat .b.e. q̄z una quelibet 4 remanebit siquidē .e.a. ēq̄l rec
te .f.a. ℈ recte .a.e. equal ē recte .f.i. cū equal sit rectū .f.g.
recte .a.b. ē cū recto .i.g. ēq̄l recte .e.b. p̄cedit 4 rectū
e.i. eq̄l ē recte .a.f. cū recto .e.b. sic eq̄l mate .d. recto .i.b.

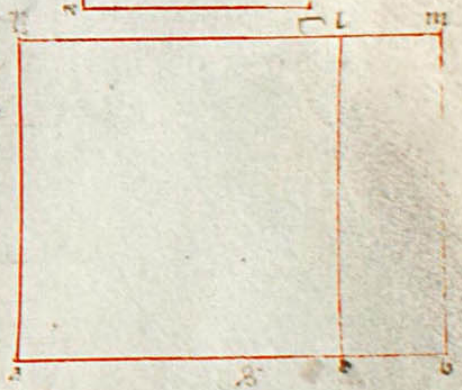






occurerit quod census et numerus equantur radicibus scias hoc fieri non posse nisi numerus
fiat equalis vel minor quadrato medietatis radicum si qui equalis
fuerit habebitur pro radice census numerus medietatis radicum et si numerus quod cum censu
equatur radicibus fuerit minor quadrato medietatis radicum extrahe ipsum numerum
ex ipso quadrato et eius quod remanserit radicem extrahe ex numero medietatis radicum et
sic quod remanserit non erit radix quesiti census tunc addes id quod extraxisti super
numerum de quo extraxisti et habebis radicem quesiti census. Verbi gratia census et 40
equantur 14 radicibus dimidiatis si quidem radicibus veniunt 7 de quorum quadrato
scilicet de 49 extrahe 40 remanent 9 quorum radicem que est 3 extrahe de me-
dietate radicum scilicet de 7 remanebunt 4 pro radice quesiti census cen-
sus est 16 quibus additis cum 40 faciunt 56 que sunt radices 14 existentes census cum ex-
ducta radice de 16 in 14 venient 56 vel radices cum de 9 addes super 7
et 10 pro radice quesiti census et sic census erit 100 quo addito cum 40 fa-
ciunt 140 que sunt radices 14 de 100 cum ex multitudine radicis de 100 in 14
provenient 140 et sic cum non solvetur quaestio cum diminutione solvetur
sine dubio cum additione. Et secundum hanc regulam procedat nosse vis adiacen-
tem lineam a b que sit 14 et dividam eam in duo equalia super g et in duo
equalia super d et constituam super unam ex quibus proportionibus tetragonum con-
stituatur primum super minorem portionem que est d b tetragonum d g et pro-
trahatur g e in directo in plenitudine a et sic recta g a equalis recte a b
et copulet recta a a. Et quia recta g b est radix census d g et recta
a b est 14 erit tota superficies a g radices 14 ex censu d g et quia cum
40 equantur radicibus 14 erit superficies a e 40 que provenit ex e d in d
a h est ex b d in d a quibus 40 si addatur quadratus sectionis d g habebuntur 49
scilicet quadratum linee g b quod quadratum linee d g est 9 quorum radix scilicet 3 est linea
g d cui si addatur linea g a erit 10 tota linea a d et si auferatur
g d ex g b remanebunt 4 pro linea d b que est radix census d g.
Ideo sic super lineam a d constituatur census a l in hac alia figura figura
remanebit superficies l b 40 que provenit ex l d in d b hoc est ex a d
in d b que 40 si extrahantur ex quadrato linee a g remanebunt 9 quorum ra-
dix scilicet 3 est linea g d que a d est 10 quorum radix census a l est 10 et
100 ut prediximus. Sed hic autem sex regulis possunt solutiones in similibus
quaestionum reperiri si oportet eos qui per eam modum procedere volunt scire ea
que diximus in multitudine et divisione et extractione seu additione radicum
et aliis rebus quibus perfecte cognoscitur quedam quaestiones super hoc proponuntur.





Expliciunt introductiones algebre et almuchabale incipiunt questiones eiusdem

Si vis dividere 10 in duas partes que in simul multitudine faciunt quartam multitudinis
totius maioris partis in se ipsam pro maiori parte radicem quam appellabis
rem remanebunt pro minori parte in minus rem quam multitudinem rerum

10. rex mm̃ comitat̃ ... mlcm̃ re. ... ville, qui dr̃ comitat̃ ndum
... ville, qui dr̃ ipi' ndicat. & dr̃ rex mm̃ comitat̃ eq̃s quarte p̃m dr̃
... & quadruplū ip̃ius equalit̃ comitat̃ unū. & mlcm̃ 10 rex mm̃ dr̃ilp
... uenit 10 ndicat mm̃ 1 comitat̃ que eq̃s dr̃lm. Retinuit & 1 dr̃
... ptē dr̃ & dr̃ ... 10 ndicat. ... dr̃ duūde ndicat 10 & 4
... ndicat 8 & plz eq̃s dr̃. & p̃dō p̃ positum re 8 & ... 10 remanēt t ... alia p̃dō ... p̃dūm ... ... adūnā
... reglis ad dr̃ uicecom̃ ... dr̃ eq̃s ndum ad quā & reducem
... ... 10 idues p̃ter eccl̃z mlcm̃ unū re ... & quet
... dr̃ ... unū p̃dōs ... 1 p̃dō rem̃ re ... & 10 mm̃ re. mlcm̃ re 10 mm̃ re. uicecom̃ 10 rex mm̃ dr̃lm. & mlcm̃
re ... dr̃ ... & 10 rex mm̃ dr̃lm ... 1 & similit̃ ... dr̃ ... 1 ... 10 rex mm̃ dr̃lm ... 1 ... 14 rex mm̃
dr̃lm ... & dr̃ eq̃s dr̃lm. Retinuit & dr̃ 1 ... 1 dr̃ eq̃s ndicat 14 dr̃ duūde 14 ndicat 1 ... 6 ndices
... dr̃lm. ... 6 ... 6 ... ndic. 6 ... ... dr̃ ... 10 idues p̃ter ... mlcm̃ unā ... dr̃
... mlcm̃ 1 ... 1 ... 100 ... 10 ... 1 ... 100 ... 1 ... 1 ... 6 ... 6 ... ndicat mm̃ 1 ... 1 ... 1 ... 10 ... 1 ... 1 ... 1

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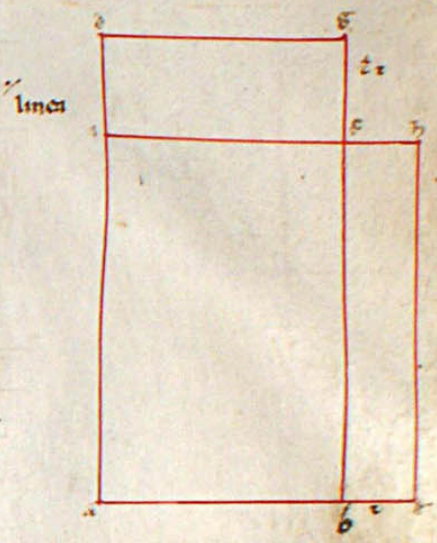
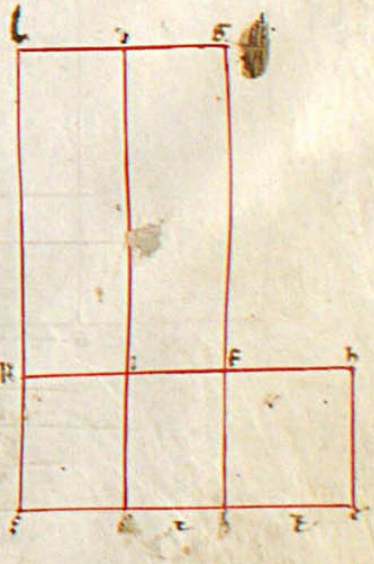
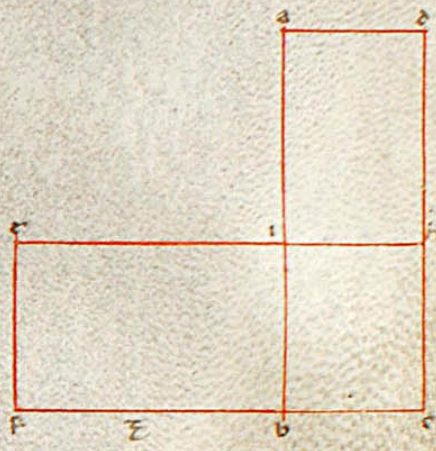
191.





a
d
f
e
c
b


a
d
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i
f
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b
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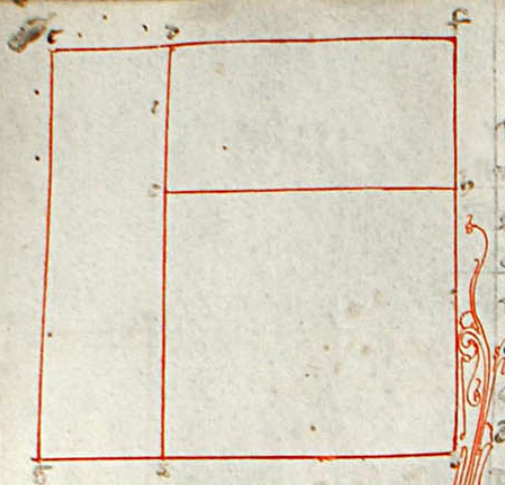
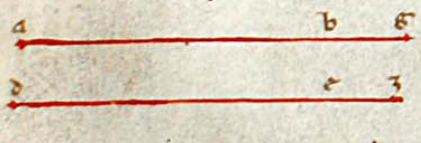
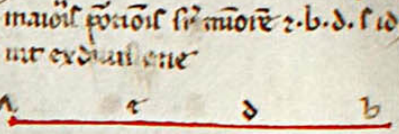
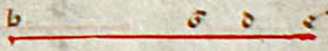
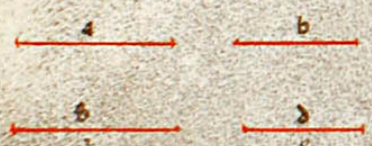
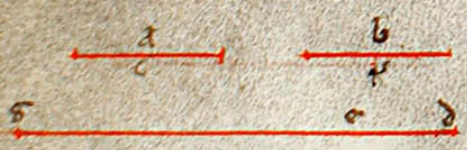



a
b
c
d
e
f



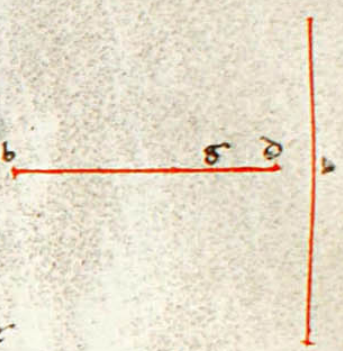






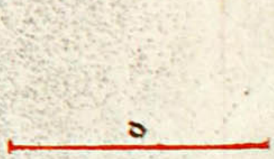
pueniet cens qui diuidit per 10 minus re pueniunt 10 minus 9 rebus quia similiter
ueris 10 minus re in 10 minus 9 rebus ueniet 10 et 9 cens diminutis 19
rebus que equantur censui. restaura ergo res diminutas et extrahe unum censum ab
utraque parte remanebunt 8 cens et dr 10 que equantur rebus 19 diuide ergo hominem per numerum
censuum et ueniet cens et dr 120 que equantur rebus 1/5 25 procede ergo secundum suam regulam et
ueniet partes esse 2 et 8. Diuisi 10 in duas partes et diuisi maiorem per mi
norem et quod pueniet multiplicaui in hoc quod est inter utramque partem et fuit 25 patet si quod
per maiorem partem lineam a b que sit res de qua auferantur b g que sit equalis minori
parti erit g g a residuum quod est inter utramque partem et diuidatur a b in g b
pueniet e ex multiplicatione g e in a g pueniet 25 et ex e in g b pueniet
diuisus s a b g ex e in a b pueniunt 25 et res una. Sed id quod pueniet ex e in a
b equatur ei quod pueniet ex quadrato numeri a b diuiso in g b ergo si diuidatur quadratus
numeri a b per numerum g b pueniet 25 et res una. Ergo similiter ueniemus g b s 10
minus re in 25 et re una pueniet quadratus numeri a b. Si licet cens una multiplicatio d
25 addita rei in 10 re diminuta. Sic sit ex 10 in 25 ueniunt dr 250 et ex
10 in re addita ueniunt decem res addite et ex 25 in re diminuta ueniunt 25
res diminute. a quibus si auferantur 10 res addite remanebunt 15 res di
minute et ex re addita in re diminuta pueniet census diminutus et sic
habentur predicta multiplicatione dr 250 censo diminutis et rebus 15 que equantur censui
quia addantur utrique parti cens et res 15 ueniunt duo cens et res 15 que equantur dr
250 quia unus cens et radices 7 equantur dr 120 ut alias quia ex e in a b pueni
unt 25 et res una. Quia si diuidantur 25 et due res per 10 ueniet dr 1/4 25 et rei
1/4 pueniet e que similiter fuerunt per numerum b g. Si licet per 10 minus re pueniet dr
25 minus 1/4 cens et 2/4 rei que equantur rei s numero a b et pueniat ex e in g b ad
de ergo utrique parti 1/4 cens et 2/4 rei ueniet 1/4 cens et res una et 2/4 que equantur dr 25
Quincupla ergo hominem et erit sicut cens et septem res que equantur dr 120 dimidia ergo
radices et c et ueniet 10 diuisa fuisset in 8 et 2. Diuisa 10 in duas par
tes et diuisi istam per illam et illam per istam et quod pueniet multiplicaui in unam partium et fuit
25 sit maior pars a et minor sit b et diuidatur a per b et ueniet d et b per
a et ueniet g multiplicaui ergo coniunctum ex g d in a et pueniet 25 pone ergo a
rem remanebit b 10 minus re et multiplicatur g per a et ueniet b. Si licet 10
minus re que extrahatur de 25 remanent 25 addita re per multiplicationem numeri d in a
que multiplicatio equatur diuisioni quadrati ex numero a in b quia similiter b s 10 minus
re per 25 re addita ueniet omnia que dicta sunt in anima celeri que sunt. Diuisi 10 in
duas partes et diuisi istam per illam et illam per istam et differentiam que pueniet inter ex eius
numeris ex diuisione multiplicaui per illam partem et fuerunt 4 sit iterum maior pars a minor
quam sit b et ex diuisione a in b pueniat g d et ex b in a pueniat e d
quia g d est id in quo multiplicatur a et pueniunt 4 pone itaque per a s per maiori parte rem
erit g b 10 minus re et multiplicetur g e in a ueniet 4 et e d multiplicetur iterum in a

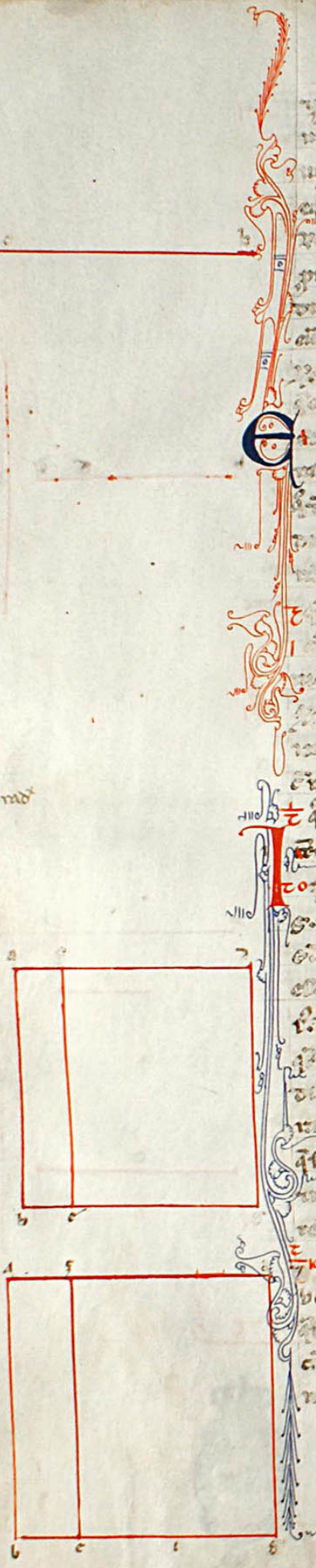
et ex e in g b pueniet res una.
Ergo ex e in 10 pueniunt 25
et due res.


b
g
d
b

A
b
d

g


b
A
d



Equame rei ꝺr 11 mlia ꝙ ſiola ꝑ 12 rueit ꝺcꝫ q̃ſtꝫ unuꝫ ꝺr 12 ꝺ
er nũꝫ ꝺ ſſiantẽãt ꝑ ½ ꝺr 1 remanebũt ſiggẽ mdiꝫ eſqꝺ, ꝑtẽ nũo
rẽ. ⁊ extrahe exeo ¼ ½ ꝺr 1 remanebũt ⅓ rei mũ ꝺr. 1 q̃ſ
mdiꝫ ꝑtẽ rei qñ mlia eũ ſſiantẽ, ꝓueit eqbũ rei. nã mlia ⅓ rei
ſſe, ꝓueniũt 24/144 eũ ꝙꝺ duplo ⅓ rei ꝺr 1 diminue ueniũt ⅓
½ ⁊ diminue. ⁊ ꝙꝺr 1 ī ꝺr 1 diminuto ueniũt ꝺr 16 addi
oia q̃ſtꝫ rei. adde ꝙ utrũq; ꝑtiũ rei ½ ⁊ ueniẽt rei ½ 1 q̃ſtũ 24/144
eũ ꝺr 16 reddue ꝙ ſiola adcẽtũ unũ. ſ. mlia unũ q̃libꝫ ꝑtiũ
nũoꝝ ꝑ 1 1 1 reduto unũ q̃libꝫ mliũ ꝑ 24 rueiẽt reducti 24/24 1
q̃ſtũ eſtiũ ꝺr 24/24 1 rẽ. ⁊ rueiẽs ceſſi eſt binũ. ſ. 12/24 1 rei
dieꝫ rẽ 362/624 6 z. q̃ſtũ ſiduũ fiũt q̃ mlia ꝑdũ reſiduo. ſ. 6/12
rei mũ ꝺr 1 ſſe fiũt 12 ulꝫ ꝑmũ miꝫ tẽ eoꝺ ordie eſt 24/144 ꝺ
ꝺr 1 q̃ſtũ mdiũ ½ 1 rẽ redigẽs ea adcẽtũ unũ eſt eoꝝ ꝺr 24/24 1
q̃ſtũ mdiũ 24/24 1 oꝓ ꝙ ꝑ. ⁊ rueiẽs ſſiũ nũ. eẽ 1.
Vlapliceꝫ nũũ ꝑ 1 mdicet ipſi. ⁊ ꝓueit ſeptuplũ ipſi. nũꝫ mlibꝫ
nũꝫ aliq̃ ꝑtiq̃ eq̃ mlia eẽ. ꝓueiet ſeptuplũ mlia ꝺ mlia ipſi
nũꝫ ꝑ 7 ꝙ ẽ mlia q̃ſtũ nũꝫ ꝑ 1 mdicet ei rẽ ipſe mlia ꝑ 7 ũma
mliũ ẽ. ⁊ mdicet 1 ꝑdũ nũ eſtũ ꝺr 7 ꝙ mdiꝫ ei ẽ 1 1 q̃ꝓueiẽs
7 duplũ ī 1 q. mdicet ſſe mlia ꝓueiũt 1/16 ꝑſtito nũo. q̃ſ
nũꝫ ꝺ q̃ ꝓieci eſtũ ipſi reſiduũ mliũ 1 mdicet ei ⁊ ꝓueit ſeptu
plũ ulſ. ⁊ q. eſtmliũ rẽ 1 1 q̃ſtũ nũũ ī 1 mdicet ei ⁊ ꝓueit du
plũ ei ſimlẽ ꝑtẽ q̃ eſtũ. ſ. 1 ꝑ 1 mdicet ꝑdicẽ ꝓueit duplũ
ei rẽ nũũ. ⁊ ſimlr ꝑtiũ nũꝫ q̃ſtũ ꝑ 1 mdicet ei nimiꝫ ꝓueiẽs ꝺcm
Iplũ ei rẽ nũũ. ⁊ 1 mdicet eſtũ ꝺr 6 ⁊ mdiꝫ q̃ſtũ nũũ ẽ 2 ꝙꝺmlia 1
rẽ nũꝫ ẽ ꝺ q̃ ꝓieci 1 mdicet ipſi. ⁊ reſiduo acceꝑ 1/2 ⁊ fiũt eſtũ
mdiũ 1 ⁊ ẽ 1/2 ꝑ reſiduũ eſtũ 1 mdiũ rectũ ⁊ reſiduũ eqbũ mdi
ciũ 16 q̃ſtũ ꝺuplicẽs mdicet 1 q̃ſtũ ꝓiecto rẽ nũũ. q̃ eqbũ 20 mdiũ
q̃ mdiꝫ eſt 20 ꝙꝑ nũꝫ ẽ 1 00 ⁊ ſi ẽ nũꝫ ꝺ q̃ ꝓieci 2 mdicet ipſi q̃
remanſſe fuit mdiꝫ q̃ ꝺcꝫ ipſi nũũ ꝑ ꝺcꝫ ꝑtẽ. accꝑe mdicẽ ꝺ 1 q̃ſ
adde eũ ẽ 2 ꝑ rei mdicet ert 4 q̃ſ mdiꝫ nũũ q̃ſtũ ꝙꝑ nũꝫ ẽ 24
Rurſ ẽ nũꝫ quo mlia ꝑ 1/2 ipſi ꝓueiũt 4 dic ꝙ eũ ẽ mlia ꝑtẽ ꝺcꝫ
ueiẽs 4 ſimlr ꝺcꝫ nũꝫ ꝑtiũ ipſi ꝓueiẽs 1/2 2 ⁊ ſimiꝫ mlibꝫ ſſe
fiũt 1/2 7 ⁊ ꝙꝑ nũꝫ ẽ mdiꝫ ꝺ 1/2 7 nã ſiũl ſũt quãlꝫ ꝙꝑ mlia ꝑ 1/2
ipſi mlia ꝙꝑ ſſe ẽ 1/2 7 mlia 1/2 ipſi ſſe ẽ 1/2 ⁊ ꝺ ꝓueiẽs accꝑe 1/2 ẽ 1/2
ſimlia ꝑ 1/2 7 ueniẽt 4 q̃ꝫ mdiꝫ. ſ. 4 ẽ ſũma q̃ſtũ mliũ ꝙꝑ
rẽ ẽ nũꝫ ꝺ q̃ ꝓieci ꝺcꝫ ipſi ꝺr 6 reſiduũ ſimlr mlibꝫ reddit ꝺmp
lũ ipſi nũũ. q̃ſtũ. h̄ ꝺmũ ẽ 6 regũlis algebre, ꝓdca ualẽt ẽ q̃ſ
ꝓpoñalis ẽ ꝺcẽte ideꝫ. ſic ẽtq; nũꝫ q̃ſtũ inuẽi. ⁊ ꝺ ſimlr ꝺcm
mliũ. ⁊ ꝙ. q̃ſtũ ꝺcꝫ nũũ. ⁊ ꝺ. remanebũt nũꝫ ⁊ ꝙ 1/2 nũũ. ⁊ ꝺ. q̃ſtũ

Alg̃ regũlam algebre reducẽ ſic. ponẽ ꝓmũ rem ꝺ q̃ abuer ꝺcꝫ rei ꝺr 6 remanent
3 in mũ ꝺr 6 q mlia mſe inuenit q̃ census 7 ꝺr 36 mũ reb 8 q̃ſtũ ꝺcꝫ
ſ. duplo ipſi nũũ. redige h̄oia ꝺ unũ census 7 habebũt q unũ census 7 ꝺr 8 q̃ſtũ
reb 7 22 ꝺr ꝙ q regũlã 7 inuenies ꝓ rem nũũ 18. 7 ſimlia ꝺ

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auferat̄ hec .g.d. ſſle 6 remanebit g nũc .ad. qui ē medietas ex
triplo nũi .a.b. qr̄ recipiendo ē nũc q̄ ex mltiplicatõe fuit .p nũc .a.g. ſi
cut dupli nũi .a.b. eiusq; ꝫ gmltatõ nũi .a.g. ī ꝫ ex̄ mltiplicatõ nũi .a.
d. ſſle g ē ſſle .a.g. ad .a.d. ita .a.d. ad ꝫ maior g. a. g. q̄ .a.d. ma
ior g. a.d. q̄ ꝫ auferẽdũ ita ꝫ ex nũo .a.d. ſic q̄ .a.e. ꝙ ē ſſle .a.
g. ad .a.d. ita .a.d. ad .a.e. eiõ g ordinẽdis hĩ notãt̄ .g.d. ad .d.a.
ita .d.e. ad .e.a. notũ mltiplicãdo g .g.d. notũ .ī. a.e. notũ .s. 6 ꝑ ꝫ
ex̄ 18 q̄ ex̄ equalr̄ mltiplicatõ .e.d. ī .a.d. q̄ ſibi ꝑ addat̄ quadr̄ medietatis
nũi .a.e. ſilicet .ꝫ ꝫ ex̄ ꝫ ſibi ꝑ q̄ mdietat̄ .s. ſibi ꝑ ꝫ adde medietatẽ
nũi .a.e. q̄ ē ꝫ 1 veniũt 6 ꝑ nũo .ad. cui addat̄ 6 .s. nũc .g.d. ex̄
nũc .a.g. 12 q̄ ē ꝫ nũi .a.b. mltiplicat̄ g 12 ꝑ ꝫ reddit̄ ꝑ 12 ſſle 12
addat̄ medietatẽ ex̄ ueniẽt 18 ꝑ nũo .a.b. q̄ ē ſi ꝑ mittat̄ q̄ ex
ducta .a.d. ī ſſle ꝑ ficiat nũc .a.b. ē augmẽto dimidiorũ 18 ī ꝗbus nũc
quo mltiplicato ꝑ nũm .a.g. fuit ex̄ ſle nũi .a.b. ex̄ ꝫ 1 q̄ ſit linea
.a.e. ē .e.q. .a.e. ī .a.g. ꝑ ficiẽs nũc .a.b. ē ſi ergo mltiplicatus nume-
rus mltiplicatõ ex .a.e. ī .d.g. ſilicet ex ꝫ 1 ī 6 remanebit mltiplicatõ .a.e.
ī .a.d. equal̄ nõ .a.b. diminuto ꝫ 1 ē ex̄ .a.d. ī ſſle ꝑ ficiẽt 18 ultimum
nũm .a.b. ē mltiplicatõ .a.d. ī ſſle ÷ mltiplicatõ ex .a.e. ī .a.d. ꝫ 1 ē
mltiplicatõ .a.d. ī ſſle equat̄ duabꝫ mltiplicatõibꝫ q̄ ē ex .a.e. ī .a.d. ex̄ .e.d.
ī .a.d. ē mltiplicatõ .e.d. ī .a.d. ē 7 cui addat̄ ꝑtẽ medietatis nũi .s. 2/16
ex̄ 2/16 7 ſibi ꝑ q̄ mdietatẽ q̄ ē ꝫ 4 fiat addendũ ꝫ .s. dimidiũ nũi .a.e.
ueniẽt 6 ꝑ nũo .a.d. ſibi ꝑ q̄ fiat addendũ nũm .d.g. ex̄ 12 ꝑ nũo .a.g.
ſibi ꝑ q̄ fiat addendũ dimidiũ ei⁹ ex̄ tot̄ nũc .a.b. 18

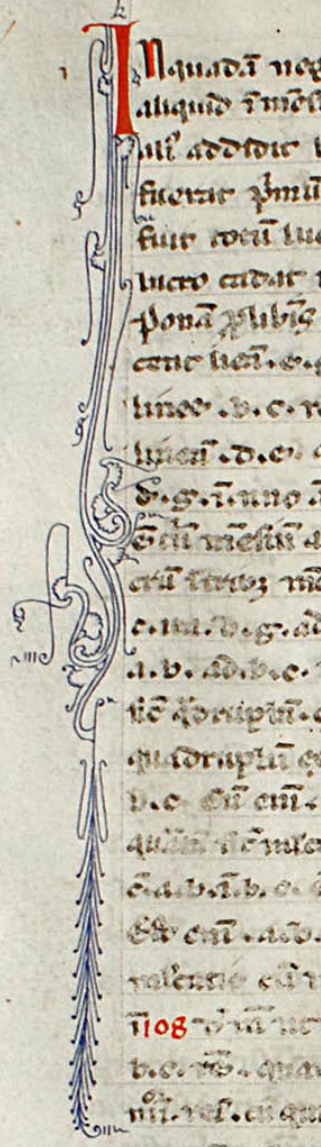
Hinc ē nũc dato ꝑ ꝓpoſita ꝛra ei⁹ ꝛdrõs 6 ꝛ q̄rẽmaſſe mltiplicatus
ꝑ reddit ꝛtã nũc .s. ſic ꝛtaꝫ linea .a.b. nũc q̄ ſſle cui ꝛtã ſſle .b.c.
nũc .d.ſſle 6 ꝛ linea .g.h. ſit ꝑ q̄ ꝛadẽs ex .g.h. nũc .g.k. q̄ ſſle ꝫ 1
ſi mltiplicatus nũc .a.c. ſine nũc .a.b. ꝛ .a.d. ī .g.h. fiãt ſibi ꝑ nũm .a.b.
q̄ ē ſſle .c.a. ad .d.a. ita .h.g. ad .k.g. eiõ g ordinẽdis ſic .c.d.
ꝑmũ ad .d.a. ſm ita .h.k. ſcõd ad .k.g. quartũ g mltiplicatõ .c.d. ī .k.
g. ſilicet .d. 6 ī ꝫ 1 q̄ mltiplicatõ ī ꝑ ex̄ mltiplicatõi .d.a. ī ignoa .ī. h.k.
notãt̄ q̄ ſi ordinãdũ ꝑ .h.k. ſilicet ꝑ ꝫ ueniẽt 15/7 ꝑ nũo .a.d. c
ſi addat̄ nũc .d.c. ex̄ .a.c. 5/7 8 ſuper q̄ fiat addendũ dimidiũ ex̄ ꝙ ne
ſciẽt 6/7 12 ꝑ nũo .a.b. q̄ ē ſi ex .a.d. ī .s. q̄ .s.ī. g.h. ꝑficiãt
ultimũ nũm .a.b. ex̄ tã mltiplicatõ .g.k. ī .a.d. notãt̄ mltiplicatõ
g.k. ī .a.c. q̄ ꝑficiãt ex .g.k. ī .d.c. hoc ē ex ꝫ 1 ī 6 ergo ex .g.
k. ī .a.d. ꝑficiãt diminuta ꝑ nũo .a.b. q̄ ſi addat̄ ſibi ꝑ ex ꝫ ex
ꝑficiãt ex .k.h. ī .a.d. q̄ ſi ordinãdũ ꝫ ꝫ ꝑ ꝫ .s. ꝑ .k.h. ueniẽt
6/7 ꝑ nũo .a.d. q̄ nũc .a.c. ē 15/7 q̄ ſi addat̄ dimidiũ ex̄
.s. 7/7 7 ex̄ 7/7 ꝫ ꝑ nũo .a.b.

÷ superat

a d c b

g k h

Hora q ad regũlã algebre ſic reducat̄ . ponẽ ꝑpoſito nũo rem̃ equal abiãt ꝛra rei ad 6
remanẽt ꝫ rei min⁹ ꝫ 6 q̄ mltiplicẽ ꝑ q ꝫ ueniẽt rei ꝫ ꝫ min⁹ ꝫ 20 q̄ ex̄ q̄ſti nũi nũc inuenti
rei . q̄ da⁹ cuicunq; ꝑpoſito 20 ex habet q rei ex ꝫ ꝛtã rei equat̄ ama rẽ ad ꝫ 20 . deinde
undiq; abiãt rei una ex remanebũt q ꝫ rei ex ꝛtã rei . ex̄ ꝫ 20 q̄ rẽ inuenit ꝫ 12 ꝑpoſito.



In quadam negotiatione quidam habuit lib. 12 capitalis cum quibus lucratus est
aliquid in mensibus tribus sicut quod totum scilicet sicut capitale et lucrum quidam
alius addidit lib. 11 et cum his omnibus lucratus est proportionaliter secundum quod lucratus
fuerat primum et in capite duodecim mensium lucratus est aliquid aliud et
fuit totum lucrum duodecim mensium et tertium lib. quaeritur quot ex ipso
lucro cadat unicuique ipsorum vel quot lucrabatur in uno quoque mense pro libra.
Ponam pro libris 12 lineam a b. et pro lucro earum tertium mensium lineam b c. et
cetera lineam e g. equalem lineae a c. et auferam a vera linea f g. equalem
lineae b c. remanebit e f. equalis lineae a b. et addam lineae e g.
lineam d e. que sit 11 erit ergo tota d f. 23 et sit g h. lucrum unius
d g. in uno anno. erit ergo coniunctum ex g h. et b c. 9. et quia annus quadruplus
est tertium mensium accipiam g g h. quartam eius que sit g i. erit ergo g i. lu-
crum in tribus mensibus totius unius d g. quia proportionaliter est sic a b. ad b
c. ita b g. ad g i. et quia numerus g h. quadruplus est numeri g i. erit sic
a b. ad b c. ita quadruplum ex d g. ad g h. Permutatim ergo
sic quadruplum ex d g. ad a b. ita g h. ad b c. Cum iunctum ergo sic
quadruplum ex d g. cum a b. ad a b. ita est iunctum ex g h. et b c. ad
b c. Cum enim numeri quantitates proportionales sunt erit multiplicatio primae in
quantum sicut multiplicatio secundae in tertiam. Et quia sic ex coniuncto quadruplum d g.
cum a b. in b c. est illud quod fit ex a b. in coniunctum ex g h. cum b c.
Est enim a b. 12 et g h. cum b c. sunt 9. quare multiplicatio surgit in 108 et
multiplicatio cum iunctum ex quadruplo d g. cum a b. in b c. surgit [illegible]
in 108 [illegible] ut reducatur hec quaestio ad unam ex quaestionibus algebre ponam lucrum
b c. [illegible] quadruplum [illegible] d g. est 92
numeri [illegible] a b. qui est 12 erit [illegible] quadruplum
d g. cum a b. 104 [illegible] Que omnia multiplicata in b c. scilicet [illegible]
[illegible] 104 [illegible] lib. 108 [illegible]
[illegible] 26 [illegible] 108 [illegible] 27 [illegible]
[illegible] 169 [illegible] 27 [illegible] 196 [illegible]
[illegible] 1 [illegible]
[illegible] 1 [illegible] 3 [illegible]
[illegible] 80 [illegible] 12 [illegible] 6 [illegible]
[illegible] 12 [illegible]
[illegible] 6 [illegible] 8 [illegible] 17 [illegible]
[illegible] 12 [illegible]
[illegible] 4 [illegible] 3 [illegible]
[illegible] 11

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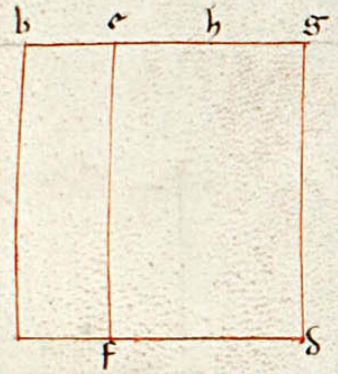
Inuenire quis numerus quo multato inscripto medietate decimi faciat nonuplum ipsi numero. Ponatur primus numerus res. Que sit linea a b, addatur ei linea b g. Sit totus modus decimi ordinati super rectam a b, quadratum d b. Producatur g. Primum latus g e. Equidistenter utrique rectarum b e. Et a d. Educatur recta d e. Super punctum g. Erit totum superficies d g. Recta agglutinatum nonuplum numero. b a. Hoc modo reducatur. Quoniam b a. Inscripsit rectangonum b d. Et reducatur e b. In b g. Hoc est b a. In b g. Per quod superficies e g. Reducatur b a. Inscripto decimi de 10 per quod superficies d g. Que est nonuplum numero. b a. Hoc est numero d a. Addita a b. Per similem rem est g et d a. Res autem a b. Cum superficies d g. Est sicut nonuplum numero d a. Equabitur medietati superficiei tote g a. Et quadrate latitudini recte g b. Que est medietas decimi de 10 remanebit per quod numero b a. Minus medietate decimi de 10 Et si diuidatur per reductum a b. Scilicet numero cum inscripto decimi de 10 per quod numerus nonuplum ipsius per quod addatur numero b a. Per reductum b a. Reducatur ei ipse per quod fiet numero b d. Et reducatur ei ipse per quod fiet res b a. Hoc est b e. In b g. Per quod multiplicetur decimi de 10 per quod multiplicetur ipse ipsi fiet decimi de 10 Et multiplicetur ipse per quod fiet decimi de 10 Et multiplicetur ipse per quod fiet decimi de 10 Et multiplicetur ipse per quod


b
c
h
g
f
d

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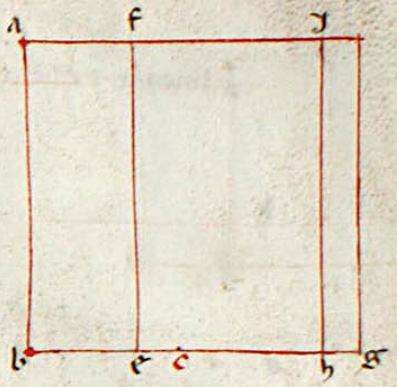
lio cel. In hac aut regula queritur radicem numeri que equalis celum. Ab
uno remotorum ad unitatem equalium equalitas requiritur aglin. a.g. cui
lit e.b.g. et pona. b.g. re. g quod sit a.g. Equale radici celum
10 radicibus et 10 dragmis. que adiungam. ad quod a.g. sit finite recta
regula. a.e. quia sit radix celum et que sit finite. f.g. aufertur sit fes.
f.h. que sit ei radicibus cel. a.g. qr. e.h. Et remanebit quod
quod a.g. sit finite. i.g. qui est 10 et quia sit finite. f.g. auferatur sit
zpuerit. ex multiplicatione. a.b. in b.e. Et rei neccario equale. b.e. m
dice ee. d. 10 qz ex multiplicatis rei mundice nili puerit unius cor.
g ex multiplicatis rei in mdice de 10 puerit mdix 10 celum. addam. g.b.
e. e. e.h. erit tota. b.h. 10 radicem de 10 qs binomii quarta ter
uidam ei duo eq ad puer. c. erit una qz linea. b.c. et c.h. et
radix de 7½ et erit sit. i.g. Et 10 qz puer ex ductu. i.h. in h.g.
i e. ex b.g. in i.h. g. sit 10 addam ml'tudinem qz. e. h. in se fit 7½
radix de 740 habebitur pquadro linee. c.g. 7½ radix de 740.
g.c.g. Et mdix de 7½ radicis de 740 auffiadam lie. c.b. ha
bebit protra. b.g. sed pquadro auc mdix de 7½ radicis de 740 et
dni et radix dimidii 7 quod sit sedy ppinquitate erit 16 qz
duplo 10 in duas pres ml'tudinem una in alia qz puerit duplo pdi
cti qs in triplo pre puerit radix 6 pre prima illarum duarum pti
re qualia 10 diminuatur re in ml'tudinem una in alia ducet 10 rel dimi
nuto celum 10 relq quinde pdictis que est inter utraq pte. s. p 10
diminutis duabus relq puerit utraq radix 6 qz qn ml'tudo pro
puerit ex alia duarum lone in duarum ne nullum puerit mis duum lep
similitudinem radicem de 6 in 10 minus duabus relq puerit 10 rel dimi
nuto celu. qz ex ml'tudine radicis de 6 in 10 minus duabus relq. puerit
radix de 600 diminuta radice 7½ celum qs est 10 relq diminuto
celu. adde g ut sit pn celum radicem 7½ celum et puerit cel radix 600
qs est 10 relq radicis 7½ celum m. h est radicis celum in mlo pro
portionali in figura pona recta. a.b. re aplicato ei lumbino recta aglin.
a.c. finiente celum pdictum radicem 600 dirou qz duorum lierum
10 relq in radicis 7½ celum erit lie. b.c. 10 radix centum qz
ml'tudo rel in 10 radicis de 7½ puerit 10 rel radix 7½ celum qs
est finite. a.c. sed celum radicis secretor. qz sit ab sidam de fi.
e. a.c. equalium equilatum et equiangulum. a.g. qui erit cel remanebit
finite. d.c. radix secretor qz radix puerit ex. d.g. in g.c. hoc e. ex.
b.g. in g.c. Nam si diuiserim lineam. b.c. in duo ea ad puer. e. erit
ml'tudo. b.g. in g.c. e. Et pono hoc. e. g. sic qd. lie. b.e. Nam si
qd pono lie. b.e. aufferas finite cel qs sit ex. b.g. in g.c. remanebit



g linea g e

quadr' line' g e e b e 4 radix 6 fiat medietas 10 radias
tf q' e e b e ille pueit 1 radix 60 d' quibz stantem' w ap
ueit e e b g 1 g e q' radix 60 remanebit 1 p'dc' lie g e
g radix 1 q' stantem' e e b e remanebit b g 4 radix 6
min' radice 1 q's rel' s' una p'tia de 10 q' stantem' e 10 remanebit p'tia p'te 4 radix 1 min' radice 6 q'z duabz p'tiz in
simul multiplicatis faciet radicem 7 ff min' 1 t q' deducta 4 i 4
remanent 1 q' deducta radias 6 radicem 1 addias pueit una radix
d' 18 6 addita q' deducta radias 6 diminute i radicem 1 dimin
uta p'ueit alia radix addita de 18 6 & sic sunt 4 due radices v
18 6 bis 4 una radicem de 7 ff d' quibz stantem' multiplicatum ra
dicat 6 adite in radicem 6 diminuta multiplicatum radicat 1 addi
te in radicem 1 diminuta q' stant 1 sicq' remanebit radix de 7 ff
min' in q' 1 t multiplicatus in radicat 6 addita i 4 radicat 1 addi
ta i 4 reliqui' opponebat' ens multiplicatis de 4 in radicem 1 diminuta
radicat 6 diminute i 4 d' in sic erunt p'mi' dictum q' e in unu
p'te q' t radicat de 1 min' duabz radicibz de 6 multiplicatum ex
in radicem 6 nimirum reddibit radix de 7 ff diminut 1 t dragmis
q' cumulate radicat de 6 in duabz radicibz te 6 diminutis p'ueit
1 t diminuta.

Et duplo 10 in radias p'ter multiplicatum una ex in radicem 8 alia ille q' re
cait q' p'ueit cumulate una p'te in radicem 8 exce q' p'ueit cumula
te alteri p'te ille remanebit di f 0 hoc p'una p'tium re q'ualium 10
diminuta re multiplicata in radicem 8 p'ueit radix 8 cellu. & multiplicatis 10
min' re ille — erit 100 recte diminuta t 0 rebz abiectis & q' huic radi
ci 8 cellu remanebit f 0 & radix 8 cellu. f 0 equalis cellu. 100 dimi
nutis rebz addendis & t 0 rel una p'te tolle abinceps p'dc' f 0 rema
nebit cel' radix 60 a sic et 0 radicibz 8 cellu diminutis & radicibz
erit 10 radix de t q' multiplicatus ille erit 10 radix 800 d' quibz abiice 60 ille
e cellu remanebit f t min' radicem de 800 q' te radix abiectis medietate
te radicem remanebit 10 radix de t diminuta radicem de f t radi
cat de 800 a p'tium tante rei residui q' re usq' 10 silicet radicem de f t
radicat 800 diminuta radicem de t & alias q' multiplicatus fuit ille. & sic
eque q' fuit cellu sigillatim p'te p'ma p'te re q' 10 diminuta re
multiplicate ille q' pueit cel' 7 10 diminuta re multiplicata p'dicte 8 radicem
radix de 80 diminuta radicem de 8 cellu simplici adde f 0 igit simpli
ci erit radix 800 & f 0 diminuta radicem de 8 cellu. & sequitur cellu
adde & radicem de 8 cellu una p'te erit cellus radix 8 cellu & sequi
tur f 0 radicibz de t ille 800 unde cel' radicem equ' mihi q' p'ficit

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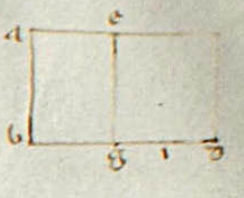

pone pro maiori quantitate rem. et minor quantitas erit res diminu
tis 4 dragine et multa rem in decuplum eius et veniet 10 census de quibus accipe radicem
et erit radix 10 censuum et multa rem diminutis 4 in se provenerunt census et dra
gine et 4 diminutis 10 rebus que equantur radici 10 censuum. adde ergo res utrique
parti et erunt census et 24 dragine equales 10 radicibus — et radici 10 censuum et
sic census et numerus equantur radicibus. dimidia ergo radices et erunt 4 et radix de $\frac{1}{2}$ 2
que multa in se et erunt $\frac{1}{2}$ 2 et radix de 240 de quibus abice 24 que sunt in
sensu remanebunt $\frac{1}{2}$ 2 et radix de 240 super quorum radice adde in
medietatem radicis 4 et radix de $\frac{1}{2}$ 2 erunt 4 et radix de $\frac{1}{2}$ 2 et radix radicis de
240 et dragine $\frac{1}{2}$ 2 pro quantitate rei. s. maioris quantitatis
de quibus si auferantur 4. hebitur minor quantitas.

Item sunt duo numeri quorum unus excedit alterum in 4 et multavi maiorem eorum
in radicem de 8 et minorem in radicem de 10 et que provenerunt fuerunt equalia.
pone pro minori numero rem et maior erit res et dr 4. duc ergo rem in radicem
de 10 provenit radix 10 censuum et multa rem et dr 4 in radicem de 8 veniet
radix 8 censuum et radix dr 200 que equantur radici 10 censuum. Abi
ce ergo ab utroque parte radicem 8 censuum et erit equalis radici 10 censuum di
minuta radice 8 censuum equalis radici 200 dr. Multa ergo radi
cem 200 in se veniet dr 200 et multa radicem 10 censuum diminuta
radice 8 censuum in se erunt 18 census diminuta radice 220 censuum census
Ubi gratia sit quantitas a.b. radix 10 censuum et auferatur ab eo quantitas
c.b. que sit radix 8 censuum. remanebit quantitas a.c. quam volumus
multare in se et quam quantitas a.b. divisa est. ut libet in duo ad punctum
c. erunt quadrata quantitatum a.b. et c.b. equalia duplo superficiei c.b.
in a.b. et quadrato quantitatis a.c. quare si ex quadratis quantitatum a.
b. et c.b. auferatur duplum superficiei ex c.b. in a.b. remanebit quadratum
quantitatis a.c. provenient ergo 10 census ex a.b. in se et ex c.b. in se provenient
8 census et sic pro quadratis quantitatum a.b. et c.b. habetur 18 census de quibus
si auferamus duplum superficiei ex c.b. in a.b. que est radix 220 censuum census
remanebunt pro quanto quantitatis a.c. 18 census diminuta radice 220
censuum census ut dictum est. Nam ex b.c. in a.b. hec est ex radice 8 censuum in
radicem 10 censuum provenit radix 80 censuum census cuius duplum est due
radices 80 censuum census. Ex due radices 80 censuum census sunt una ra
dix de 220 censuum census et quia radix 10 censuum diminuta radice 8
censuum equatur radici 200 dr. et eorum quadrata similiter sibi invicem equabuntur.
quare 18 census et radix 220 censuum census equatur 200 dr. Reduc ergo hec omnia
ad census unum et illud est. ut multiplices eam per $\frac{1}{2}$ 1 et per radicem de 20 Nam
ex multiplicatione de $\frac{1}{2}$ 1 et radicis de 20 in 18 census diminuta radice 220
censuum census provenient census ut inferius demonstrabo. Et ex multiplicatione $\frac{1}{2}$ 1 in

dicit 200 rndr 200 q uenit 900 radix 80000 cel aie drie 900
radica 80000 q radix ste 200 radix 900 eie reti & minor
nio cu sl addamus 4 hebit primon nio 24 radix 900 rac.
modus aut inuenti radicem 900 radicis 800000 & radix
200 radicis 900 ste 200 900 rubrica q hebit 800000 remanebit
2900 q radicem que 24 900 addat sup 4 900 ingredientes 900
erit 900 & 4900 radicem 900 neque radicem 900 & 900 radicem
200 radix de 900 ut primo nio inuenit & sit summa secundi
reducti 18 cel radicem 200 cellui cui addunt cellu q habet
q quadrati reliqui milies mille unius binomii q quadrati binomii
sui residui eglis sit nig remanet. Duplex cui residui 18
radicem 200 cui binomium 18 radix 200 q simul mixti
f q reducti 18 ste uenit 200 f addita reducti radicem 200
addenti radicem 200 diminuta uero 200 diminuta q hz ex
cellis & 200 remanet f diminuta ut primo. Facimus in similem
unum 18 cel min radicem 200 cellui cui simul binomium 18
cel radicem 200 cellu cellu ege dicet in f cellui cel residuum simi
rium 18 cel radicem 200 cellui cel q sit radicem f 18 radicem
200 milesimum 18 cel diminuta radicem 200 cellui cel egdis
in f cel cui q similesimum 18 cel min radicem 200 cellui cel
ista & 18 radicat 200 si 2 f radicem & 200 numeri unius cel
pueler. Hoc q notum demonstremus. Positum aie addu
tionem unius q uelit. q sic quedam prius p motum
q sume rei quantitates omnes, q uocatur inequalis ab ali qua
ta quantitas ad aliam q uocatur ei milesimo. minoris q uocatur illius duas
quantitates q uocatur medie. minoris illius cui q uocatur. sic mil
to minoris. erit enim de duas q tatis q uocatur ei de medie. mi
noris illius cui quantitatis. Verbi gra. sit res q tates. ab. omnis
proportionalis ter q tatis quantitas. d. de q tatis. e. sit. d. minoris q
sit sic. d. de. e. ma. a. ad. b. a. b. ad. c. dico q tres. a. b. c. q uocatur
b. c. & sic sup. e. q quantitates. a. b. c. q proportionales quales sic. a. ad. b.
b. ad. c. ei quantitas sic. a. a. b. ad. b. a. b. ac. ad. c. omnium q tatis
sic. q tates. a. b. ad q tatem. b. c. sic. a. b. ad. c. & sic. b. ad. c. ma. d.
ad. e. q sic. d. ad. e. ita q tates. a. b. ad q tatem. b. c. sit milesimi
de quantitate. b. c. ei milesimi q tatis. e. quantitati. q
tatis. a. b. ut probatum q tres quantitates. a. b. c. q uocatur. d. minor
de 8 ma. radix de 10. f. sit 8 & h. sit 10 & ita sic. e. ad. b. ad.
c. & sic. c. quas q uocat. a. ad b. & b. ad g. ma. q tatis
ter. a. ma. b. & minor. ac. ter. q tatis. q uocatur. ei

a b c

d e

f g h

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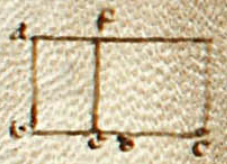

d
f
b
a
c

4000 q̄ē nūq. ē d. cui ſ. addam' d. c. ſ. 4 h. alebit' ꝓport. ē c. mdic' 12 4 min' 4 q̄ē minor ꝑ. ſ. ſi ꝓportionarium' ē d. x. b. d. ſ. tadi' 12 4 min' 10. d 4 remanebit ꝓmum ꝓport. ſ. ꝓmū. b. c. 14 4 min' tadic' 12 4 Poſſum' eni' alit' ſd'loue' ẽde q̄ꝯ iuenire. ſ. ē ut ꝓmus min' duꝑ pāriū rē. alia nō 10 min' re. q̄ ꝑ dimiſſione 10 min' re. ire. ueſtr dī. q̄ ꝑ dimiſſoē rei ī 10 min' re. ueſt tadix 4 diminuto dī 4 q̄ eī diuidit 10 min' re. ꝓpē ꝓueſt dī. ſimilabit' dī ire. ue niēt utiq; 10 min' re. q̄ ſemꝑ eī mlcat' nūq diuidēs ꝑ exeūt ꝓuen'. diuiſ' ſibi q̄ eī diuidit' rei ꝑ 10 min' re. ꝓueſt tadix 4 diminuto dī. ſimlit' tadicē 4 min' dī ī 10 min' re. ꝓueſt in rei. ꝑ ꝓmlcat' tadix 4 min' dī ī 10 min' re. ꝓueſt 10 tadix 400 diminuta tadicē 4 cēſſū. ire 10 q̄ mlcat' ſic fit. mlcat' ꝓmū tadix 4 ꝑ 10 ꝓueſt tadix 400 addita. tadix 4 re. diminuta ꝓueſt tadix 4 cēſſū diminuta. rdr' diminut' ī 10 addita ꝓueſt 10 dī diminuta. re ꝓmlcat' dī diminuta. diminutā ꝓueſt 10 addita diminuta re. ſic ꝓmlcat' ma tadix 4 diminuto dī 10 min' re. ꝓueſt tadix 400 rdr 10 min' re. tadicē 4 cēſſū rdr 10 q̄ eſt' rei adde ꝑ unū ꝓ 10 dī. rol le. abuiq; ꝓte re. ſ. ē 10 tadix 400 diminuta diuide rebꝫ tadicē 4 cēſſū q̄ eſt' 10 rdr' diuidam' —— ꝑ 10 ueniꝫ. 1. tadix 4 cēſſū diminuto 4 rei diminuta tadicē 4/10 cēſ q̄ eſt' unī dī. ut ꝑ reducto dī ī res ꝓueſt 10 min' re. ſi dq̄ē eſt'. unī dī. ſ. tadix 4 q̄ 1 min' q̄ta rei. 1 min' tadicē 10 cēſ mlcet' ire. ueſ ter ſibi ꝓpi mlcatē 10 min' re. q̄ mlcem' re. ī tadicē 4 tam. 1. di minuta q̄ta rei. 1 tadicē 4/10 cēſ. ueſter tadix 4 cēſſū. 1 res diminuta 4/10 cēſ. tadicē 4/10 cēſ cēſ q̄ eſt' 10. min' re. adde ꝑ unū ꝓ ꝓpi re et 4/10 cēſ. 1 tadicē 4/10 cēſ cēſ. ſ. tadix 4/10 cēſ cēſ. 1 4/10 cēſ. rdr' 10 equales radica 4 cēſſū. 1 re rebꝫ. Reduc ꝑ tadicē 4/10 cēſ cēſ. 1 quota cēſ. ad cēſſū unū. ſ. ē ut mlt' ī ꝓdicē 400 min' 10 drūc. 1 ꝓueſt cēſ. dīm ut reducat dī 10 q̄ ſtat eī cēſſū. 1 tadicē 4 cēſſū. 1 diuſ rei. ſ. appoīt cēſſū. mlta. eī ꝓdicē 400 dimi nuta 10 ueſter 10 rei. ſ. ue equat' cēſſū. 1 tadū 400 min' dī 10 ut ſupi' iuenim' d. in equatiōe ut ꝫ. 1. b. cēſ. ꝓpoīt.

Et ſi ali' mod' ꝓcedendo ſilēs. q̄ꝫ dimittam' ne nō ꝓfi cue ꝓpi neceſſaria tamē tibi. ſ. duo mīi. q̄ueſ cūq; fuīt. diuidi' ſꝫ ꝓmū. 1 ꝓm' ꝑtim. 1 q̄ ex utriuſq; diuiſione ꝓuenit ſibi inuī cem fuīt unus uter uī. 1. adeo ut ex utriuſ fuit diuiſū. 1. b. diuidit. b. ꝑ. 1 tantū. ē d. 1. ꝑ. b. nec ꝫ. d. ē. dico q̄ ſ. ē d. mlt' ī. d. ē. eſſet' ꝓpi mlcatē. 1. ſ. ſic ꝓtuit. q̄ē diuiſi.

unse ꝙ pueniet cēs ½ 1 ꝙ radix cēsus ¼ 1 ꝙ hec equne drīs 100 bñ
ut reducam' ḥ gradum cēsū m'cau ca ½ 1 min' radicē d ¼ 1 ꝙ cēs
cēsus eq' drīs 1 4 omn' radicē d 12 4 q̄ſt radix q̄s radix d 12 4 min' 4
cēs res hoc ē maior pāg.

Et sm̄ solum' ꝑcedē ꝑmuntēz minois ꝓpōe cēs rē minor uō
pat cēs 10 min' re ꝙ q̄ ꝑ eductionē 10 min' re ꝙ rē ꝑueit radix ¼ 1
ꝙ medietas drū m'cauſ rē ꝙ uenit 10 min' re ḥ ex m'cauē radicē ¼ 1
ꝙ medietas d drū rēs ꝑueit radix cēs ¼ 1 ꝙ medietas rei q̄ ḥ equē
10 min' rei ꝙ uñ habuim' ꝓpe abstulis medietatē rei remanebūt 9
drīs cēs ¼ 1 equal' 100 diminutis ½ 1 q̄ simlr̄ utrūq; ꝓpe rē fac cēs
¼ 1 equal' drīs 100 rebz ¼ 2 diminutis rebz. Adde q̄ utriq; ꝑ
20 res ꝙ tolle abutrūq; ꝓpe cēs ¼ 1 ꝙ uenit cēs ꝙ 10 q̄ equē 20
rebz. Age ih'c sm̄ algebram ꝙ uenies re s. minore ꝓpe cēs 14 min'
radicē d 12 4 ut supi' inuenim'. Et nota ꝙ sm̄ hanc m'cam cēs ¼ 1
ꝙ medietatē rei equale drīs 10 min' re ꝙ ceruzam adurūq; ꝓpe
medietatē rei cuī potuim' addē utriq; ꝑ rē ꝙ fiet m'ca cēs ¼ 1 res
½ 1 equales 10 drīs. Vñ simlr̄ uenies ḥ oīa rē ḥ ebrū cēs ½ 2 ꝙ m'cam cēs
cēs ¼ 11 equales drīs 100 uñ ut reducam' ḥ oīa ad ꝓportionē huī cēs 1
m'ca ca ½ 2 min' radicē ¼ 11 ꝙ uenit cēs eq' d' duc 240 min' radicē
12 400 q̄ſt radix ſt 14 diminuta radicē 12 4 erit res li ē minor ꝑ
maior nō pt ē radicē 12 4 min' 14 Potest̄ rō hic alius mod'
ꝓcedē ḥ ut q̄ drīs diuidat̄ ꝙ sac sm̄ hanc diuisionē 10 diuisa
ē media ꝙ erūt 5 ꝙ ductē q̄ ſt 10 admanoīs ꝓpe uñ maiō ꝑ ad
minoīs ꝙ fiūt m'cauē 10 in minoīs ꝓpe ſ in 14 min' radicē 12 4
faciūt esse m'cauī maioīs ꝓpe rēs.

Et sm̄ ꝓpōem 10 diuidē ꝓpe maioīs ꝓpe rē minoīs nō 10 diuisa
ꝙta re ꝙ m'ca 10 erūt 100 diminutis 10 rebz ꝙ m'cauē esse uolt cēs 1
eq' 100 diminutis 10 rebz. Adde q̄ utriq; ꝑ 10 res ꝙ fiet cēs ꝙ 10 res equales
drīs 100. Age q̄ ih'c sm̄ algebram ꝙ.

Quisit 12 idoneas ꝓpōes duarū quarūlibet ꝑtiū ꝑtis ꝙ m'cam ḥ hīs
exemplū inse ꝙ ſt ꝙ drīs. Ponē ꝙ maioīs ꝓpe rē, ꝙ minoris 12
min' re ꝙ reliquū erit 12 min' re ꝙ rēs 12 uenit nūs a b c ꝙ reductis ꝑ 12
min' re uenit a b c ꝙ ergo m'cauē ex a b ſt ꝙ ex b c ſt cēs ¼ a b c
ꝙ nūs a c ergo duarū ꝑtiū ꝓpōis ex a b ſt ꝙ m b c cui m'cauē duplū a
b ꝑ b c. Et q̄dē nūer a b ꝙ b c cui ꝙdē nūs a c ḥ equalēs
nūo a b ꝙ b c, ꝙ uenit ¼ ꝙ duplū a b ꝑ b c uenit 2 ꝙ ad
dās ē ¼ fiunt 6 ¼ ꝙdē nūs a c. Et a c ē radix 6 duūs ē ei
idoneus ꝓpōs ꝙmodo supi' d'mōstrum. Vel̄ minore ducta ꝑ maiorē
ueniet 1 ꝙ cui minor ꝓpe radix ½ 1 min' radicē ½ ꝙ maior erit radix ½ 1

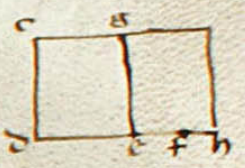
a b c

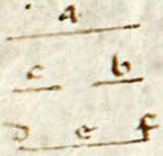
— ꝛ mdix ½ ꝑ cū diuidere ꝛz mun̄ re. ſ. minꝰ pars mne
ꝓuen̄ mdix ½ | mun̄ mdice ½ mlta mdicē ½ | mun̄ mdice ½
ſ̄ re ꝛ ueiēt mdix cēſ ½ | mun̄ mdice mediet̄ cēſ q̄ equē
dr̄ꝰ ꝛz mun̄ re d̄n̄ mſ̄ mdicē unſ cēſ ꝛ dmidi. mun̄ m
dice mediet̄ cēſ. ſ̄ ſe uenient duo cenſ mun̄ mdice tū
cenſuū cēſ q̄ equāt mltudi ꝛz mun̄ re ſe. hoc ē dr̄ꝰ 1 ꝛ ꝛ
ꝛ uni cenſui dimittꝰ ꝛ ꝛ radicē, adde ꝙ unū ꝓ ꝛ ꝛ re
ꝛ tolle. abutꝝ ꝓ cenſū. ꝛ ueiēt cēſ ꝛ ꝛ res dimidiū mdice
tū cēſuū cēſ q̄ equē dr̄ꝰ 1 ꝛ ꝛ mſ̄. ꝙ cenſū mun̄ mdice tū cē
ſuū cēſ ſ̄ ſuū binomiū. hꝫ ē in 1 radicē tū ꝛ uenient duo
cenſ dimidiū. ꝙ mlta unū cenſuū dimidiū radicē tū
cēſuū cēſ ſ̄ medietate ſui binomiū hꝫ ē ſ̄ ½ mdicē d ½ ue
nient cū cēſu dimidiū ꝛ mlta ꝛ ꝛ reſ ſimlr ſ̄ ½ ꝛ mdicē d
½ ueiēt ꝛz ꝛ reſ ꝛ mdix ꝛ ꝛ z cēſuū ꝛ ſic hꝫ abuna ꝓ ꝛz re ꝛ ꝛ
dix ꝛ ꝛ z cēſuū dimidiū cēſu q̄ equē mltudi re ꝛ ꝛ ſ̄ ½ ꝛ
mdicē d ½ hꝫ dr̄ꝰ ꝛz ꝛ mdix 1 4 4 4 z. adde ꝙ cēſū unū ꝓ ꝛ
ez reſ ꝛ ꝛ ꝛz ꝛ mdix ꝛ ꝛ z cēſuū q̄ equāt cenſui ꝛ dr̄ꝰ ꝛz ꝛ mdicē d
1 4 4 4 z q̄ mdix ē ꝛz mdicē d 108 dimidia ꝙ mdicē ꝛz ꝛ mdicē
ꝛ ꝛ z ez ꝛ dr̄ꝰ ꝛ mdix de 108 q̄ mlta mſe ueiēt ꝛ ꝛ ꝛz mdicē d 108
d quāz abice nuōꝰ q̄ſue cēſu. ſ. ꝛz et ꝛz mdicē de 108 remāebit
ꝛz q̄ mdicē abice ꝙ mediet̄ mdicē remāebit 6 ꝛ mdicē d 108
dimidiū mdicē ꝛz ꝓ q̄ ſtitate re. ſ. ꝓ maiorē ꝓte rem q̄ uōꝰ ꝓ
ē 6 mdix de ꝛz q̄a ꝛ pāte ueiēs ſignas minorē parte re
maiorē uō ꝛz mun̄ re ꝛ dimidiaꝝ ꝛz mun̄ re ꝓte ueiēt mdix ½ |
mdix mediet̄ dragme q̄ mltudi ſ̄ ueiēt mdix ½ |
ꝛ mdix mediet̄ cēſ q̄ equāt ꝛ nz mun̄ remlta hꝰ ſ̄ ſe erūt duo
cēſ ꝛ mdix tnū cēſuū equāt ꝛ ꝛ cēſuū dimidiū ꝛz rebꝰ
adde ꝙ unū ꝓ ꝛ ꝛ reſ ꝛ tolle cēſū abutꝝ pāte remanebit
radix tū cenſuū ꝛ cēſ ꝛ ꝛ res q̄ueq̄ ꝛ ꝛ dragmꝰ redige
hꝰ ad cēſū unū. ꝛ ē ut mltꝰ ea ꝓdict ½ dimidia me
diet̄ dragme ꝛ ueiēt cēſ ꝛ mdix ꝛ ꝛ z cēſuū dimidiū ꝛz m
dicꝫ eq̄les ꝛz radicꝫ d 108 mun̄ ꝛ z dragme. mlta ꝙ medie
tē radicē q̄ē cēſu. ſ. ꝛ mdix d 108 dimidiū 6 mdicꝫ ſ̄ ſe erūt
1 4 4 4 dimidiaꝝ ꝛz mdicaꝫ d 108 ſimꝫ q̄ adde ꝛz mdicē ſ d 108 dimi
nuꝫ ꝛ z dragm remāebit ꝛ z d̄ſq̄ mdice abice mdicē de 108 mſ
6 dꝛz minorē ꝓtē mdicē de ꝛ z ꝛ dragm 6 diminuti mdicē d 108
ue ſiēt mueñ.

Quiſi 10 mdiuꝫ ꝓ ꝛ d̄nū qualibz illaꝝ ꝓ q̄a ꝛ mltudo q̄ſlez
ceuntū ſ̄ ſe ipſū ꝛ minꝰ mun̄ remaiori ꝛ remanet ꝛ dragm.

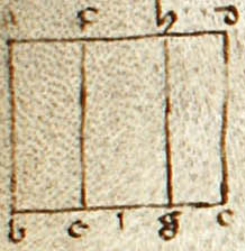
Pone minorē ꝓpē rē ꝫ maiorē 10 diminuatur ꝫ diuidē 10 minꝰ re īrē ꝫ ueīt ac ex ꝫ diuisa ī 10 minꝰ re ꝙ ꝫ ē ꝫ. b. ī gēs ꝙ ex. a. ducta ī. b. ꝓuenit 1 ꝙ similiter ꝙ dē mīa. a. ꝙ dē mīa. b. ueīt ꝙ tus unitatis. s. 1 ꝙ ponam ꝓ mīo b radicē unī āc. ꝫ ꝓ mīo. a. radicē unī cōs ꝫ duas dragmas ē milēs. b. ⁊ se ueīet cōs. ꝫ a. ⁊ se ueīet cōs ꝫ t dragmis diminuto ꝙ cēlū. s. quadto. mīa. b. ex cēlū ꝫ duabꝰ dragmis. ⁊ ꝙ ex ꝙ sto mīa. a. remanebūt 100 t dragmē milēs ꝙ quadtī mīa. b. ꝓ ꝙdā mīa. a. s. cēlīs ꝓ cēlū ꝫ duas dragmas ueīet cōs cōs ꝫ duo cēlī. qui eq̄ūt uni dragmē. d. ī. ponam quadtī. c. e. quālē cēlū cōs. q̄ mīi q̄libet latꝰ ipi⁹ ē cōs ꝫ addā mīlineā. d. e. q̄ cōs līnea. e. h. q̄ sit t iacebit. e. h. ī directo lineē. d. e. ꝫ plenū figā rēi angli. g. h. q̄ ꝓuenit. ex. g. e. in. e. h. hoc ē ex cēlū in t q̄ sit g. h. ē. t cōs ꝙ tot sit. e. h. ē cēl cōs. ꝫ duo cōs ꝫ eq̄ūt uni dragmē q̄ ex. e. d. ī. d. h. ꝓuenit dragma. s. ex cēlū icognitū ꝫ duabꝰ dragmis duidam. e. h. ī duo eq̄lia ī f. reīet. e. f. ꝫ q̄ ex. e. d. ī. d. h. ꝓuenit. 1 ꝫ d. e. equal' ē ex. e. d. ꝙ ex. d. e. m. d. h. ꝓuenit. 1. cui sit addam quadtī mīetis q̄. e. f. hēbit ꝓ quadto mīi. d. f. ꝫ sit ꝙ radicē sit addicēs unitatē. h. f. s. eīt totus. d. h. radix t ꝫ una dragma. sit ē q̄dē mīi. a. cui indic q̄ ē mīo. a. ducatur in b ueniūt 10 mīi re. q̄ similiter ī mīa quadtī ē. s. cōs ꝙ quadtī mīi. a. s. ī radicē t dragmā ꝫ ī dragmā ueīet q̄dē 10 mīi re. sit. e. 100 dragmē ꝫ cōs. diminuis 10 rebꝰ. sit ē milēs cōs ī radicē t 1 ꝓuenit duo q̄ē sint cōs ꝫ unī cōs. q̄ equāt dragmis 100 ꝫ cēlū diminuis 10 rebꝰ adde ꝙ 10 rebꝰ ut ꝓ ꝫ tolle. ab utrīq; ꝓ ꝫ cēlū remanebūt 11 dīc duo q̄ cēlū cōs. 10 rebꝰ q̄ equāt 100 dragmis. sit ut redigam ꝙ ad ꝫ unū adde ꝙ unū. mīa ex ꝓ ꝫ dragmē. ꝙ ē milēs radicē t cēlū cōs ī radicē ½ dragmē ꝓuenit cōs ꝫ ē milēs 10 rebꝰ ī radicē ½ ꝓuenit radix t 50 cēlū ē milēs 100 ī radicē ½ ꝓuenit radix ꝙ 50 dragmas ꝙ cōs ꝫ radix t 50 cēlū equāt radici ꝙ 4000 dragmas. Hui⁹ simile in hāc figā ꝫ ꝓ quadtī. c. e. cēlī ꝫ sup. g. h. radicē t 50 cēlū q̄ē. e. h. eīt radix t 50 dragmas. ꝙ duīsa ꝫ duo cōs ī f. eīt una ꝙ quātitatis. e. f. f. h. radix 40 q̄ē ꝙductū q̄ntuplus. d. e. ī. d. h. cū quadto q̄ntuplus. e. f. ē sic d. f. inse. ꝙ ex. d. e. ī. d. h. hoc ē. ex. c. e. d. ī. d. h. ꝓuenit radix. 4000 dragmas. ꝫ ꝙductū. e. f. ⁊ se ꝓuenit 40 ꝙ ꝙductū. d. f. ⁊ se ꝓuenit radix 4000 ⁊ 40 dragmē. q̄ē mīus. d. f. ē radix mīor 4000 dragmas ꝙ 40 d. qui ⁊ si autē. d. f. s. radix 40 remanebit ꝓquātitatē. d. e. q̄ē res radix indigis 4000 dragmas. ⁊ d 40 di

a b





census


a
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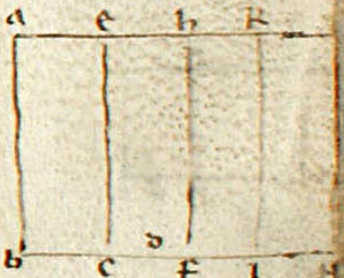
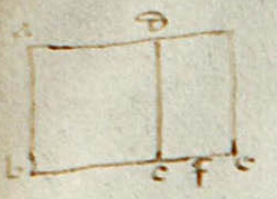
Et 10 radices 8 & una radix 12 80 dragmarū & ille, per .a. c. ij. & 2 ppōsito
auē ij. & 1 una radix 12 una radix ad 16 radices 12 12 800 somā
producta ad numū quē inc. 2/2 1 2/2 10

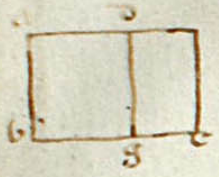
Et quādā auē cui 12 radices & radix mediet⁹ & 1 radix tocies
equales cēsui. Pone, pro auē cēs & 12 radices & radix mediet⁹
cēsus 12 radix tocies cēsus ejusdē cēsui tociēs quotū sum. a. c. cēsui adue
radices vero cēsus sunt sup. d. g. 12 radix mediet⁹ cēsus eto sup. e.
h. radix tocies cēs & ille sup. b. k. per. c. g. & erit 2/2 e. g. erit radix 1/2 dragme
b. i. erit radix 2/2 dragmē & sic tota. b. c. & res erit 12 radix 1/2 radix 1/2
milia & ij & ille. ducet 4/6 1 radices 8 & radix 1/2 4 radix 2/2 unī dragme, per
tate cēs. ij & quā auē & illius scire quo milia & 12 radix 1/2 radix 1/2 ille
milia. 1 primū & ille radices mediet⁹ dragmā ille radices tocies dragme
ille. ducet 1/2 1/2 1 & 4/6 1 dū milia duplū & 12 radices 1/2 ducet radix 8 &
milia item duplū & radices 1/2 ducet radix de 1/2 4 post milia radices 1/2 1
radices 1/2 ducet radix 6 dragmā & radices duplicat ducet radix 2/2 dragmā.
Et quādā auē cui 12 radices & radix mediet⁹ & 1 radix tocies & 8 dragmā.
Pone, pro auē cēsui. due & 12 radices cēs & radix 1/2 cēs & radix 1/2 cēs & 1 12.
10 dragmas. & tolle. abutēdo pro duas res & 1 erit 10 dragmā minus duabz
rebz equalles radici mediet⁹ cēs & radici tocies cēs milia & 12 10 dimi
nutis & rebz ut sic 1 10 1 1/2 cēs diminutis 80 rebz & 1 sic milia radici
mediet⁹ cēs & radici cēs & milia sunt 1 4/6 cēs & radices 2/2 cēs cēs. adde
& utrobz pte 80 res & tolle utrinq pte 4/6 cēs & radices 2/2 cēs cēs & 1 10 dragmā
& cēs 1/6 2 minus radice 2/2 cēs cēs que equātur 80 rebz duo & ij omnia aduna
cēsui & de ut milles cap 111 1 2/2 dragmā & radices 190 2/2 2/2 in quibz
milia 80 rebz ven.

Et si dicerēs d quādā auē minus duas radices & 1 radices mediet⁹
& 1 radices tocies & 1 remanserit 10 dragme. Pone, pro auē cēsui. & sic
quadrā. a. g. & minue. a bz duas radices & 1 radices mediet⁹ &
radices tocies & 1 q sunt sup. a. c. re. k. h. a. remanebit ex toto quādo sup.
li. g. q & 10, manifestū & ex 1 q nūs. b. c. & 2/2. & 1. c. f. & radix
1/2 & f. l. & radix 1/2 dragmā. q & tot nūs. b. l. & 2 & radix 1/2
radix 1/2 & nūs. l. g. & ignotū li. q & sup. l. g. & & nel .f. l. g.
pueniet 10. li. b. g. & ejus & nūo. l. f. g. ex. b. g. & f. l. g. ue
nit 10 dividam unumq nūz. b. l. unde equalia que sunt. b. d.
d. l. & erit & mihi. b. g. & f. l. g. cū quadrō nū. l. d & q & quadrō nū. g. d.
& nūs. g. d. & erit not. Cui si addā nūs. b. d. que not & sic mediet⁹
& 1 radices 1/2 radices 1/2 & erit tot nūs. g. b. q & res not que sunt lemei
nū & ille & erit quadrā. a. g. notū. f. auē quē.

Et si dicerēm 1 adde sup quādā auē 1 radices & 1 radices mediet⁹




a
d
b
c
f
e


a
d
b
c
s
e

a
d
b
q
f
e

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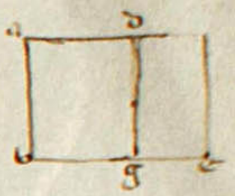

Si sup quodā auē addam radicē medietatē ei⁹ milenum aggregū fie
ri pueri q̄ d̄ pū ei⁹ sit sēi figā. quadrū. a. g. cōs. rō. g. d. e. mdiz ½
cōs rō. z. p̄ q̄ b̄ mse milena fuisse q̄ d̄ pū cōs erit sup. a. e. mdiz ½
cōs ū. q̄ pueri ere. a. b. īmz. v. e. g mīz. v. e. e mdiz ½ dragmaz.
rō. b. e. e. d̄ quibz sicut. a. e. g. e. q̄ē mdiz ½ dragmē remanebūt p
re. b. g. rō mīz radicē ½ dragmē quibz mse milenas reddūt ½ ½ mīz
radicē 8 dragmaz p̄ q̄esito auē.

Multiplicetur q̄dam auē rō radicē z p̄d auē rō milenū radicē z dragmaz
q̄ pueri z dragmē. p̄ē p̄ p̄d auē rē. rō milenū rē. rō radicē z p̄ē rō radicē
z ueiet cōs dragmē rō mdiz 12 cōs ū rō mdiz 8 cōs ū q̄ q̄ uiē z dra
gmas. tolle ab utq̄ p̄te ser remanebit cōs rō radicē 12 cōs ū rō mdiz 8
cōs ū q̄ q̄ 1½ dragmas. milenū ē mediet rō radicē mse hoc ē radicē
z rō radicē z dragmaz ueiet 4 dragmē rō radiz z ½ dragmaz q̄ adde
1½ erūt 4½ rō radiz z ½ d̄ q̄ rō radicē a bice medietatē rō radicē. rō radicē z
rō radicē z dragmaz p̄ q̄ rō radicē z ½ dimidiū rō radiz z rō
radicē z dragmaz p̄ q̄ rō rē. h̄ē q̄esita auē.

Cuidā auerī addidi 7 dragmas rō milenū aggregū rō radicē ei⁹ pī
q̄ pueri ter cuplū ipi. p̄ē p̄ p̄d auē rē. rō adde ei 7 rō milenū aggregū p
radicē terū reī rō ueiet 10 reī h̄ē terū reī. q̄ sta ē 10 reī rō radicē ueiet 100
cōs rō milenū. rō radicē z rō rō rō ueiet z reī rō milenū rē 7 rō dragmas rō ueī
et 1 cōs rō 1½ reī rō dragmē ½ q̄ q̄ milenū p z reī ueiet z cubū ½ cōs rō
reī 1½ 7 q̄ q̄ cōs cēsimū 100 abice. a. b. q̄ p̄te ½ cōs remanebit z cubū ½ 1½ 7
rō reī q̄ q̄ cōs 48 duūte hōiā p̄ē rō uenīet z cōs rō dragmē 1½ 7
q̄ q̄ 1½ reī 48 duūte hōiā reduce ē hōiā ad cōs unū. fiēt duūte p z erūt cōs ½
rō dragmē ½ 9 equales reī ½ 10 dimidiū ē mediet ½ ½ 9 q̄ milenū fiēt
½ 3 d̄ q̄ abice ½ 9 remanebit ½ 1½ q̄ rō radicē q̄ ½ 6 abice dimidiū
radicē remanebit z p̄ q̄ rō rē. q̄ p̄ q̄ auē q̄esito.

Cuiuscūq; quadrati inequalis q̄ dragmas 7 q̄ radicē ei⁹ addidi
radicē ei⁹ milenum unū q̄ dragmas. Latus q̄ pueri de cuplū maioris q̄
tetragoni. p̄ē p̄ minoris q̄ dragmas rē. q̄ p̄ maioris z rō. 7 addē unū cuiq; duar
radicē sua. rō milenū unū q̄ q̄ uiē. h̄ē rē radicē rei ū z reī rō radicē z
reī rō ueiet z cōs rō radicē ei⁹ cōs ū rō radicē z cubū ½ q̄
ē milenū rē rei ū z reī ueiet z cōs rō radicē rei ū radicē z rē pueri m
diz z cōs ū q̄ q̄ reī rō radicē terū reī pueri mdiz z cubū rō milenū
terū reī ū radicē rei pueri mdiz z cubū rō. h̄ē q̄ q̄ cuplū maioris
q̄ tetragoni h̄ē 20 reī rō. rō. 7 cubū rō radicē z cēsimū rē
nebit 20 reī rō dimīnutas z cēsimū rō dimīnutū radicē z cēsimū equales mil
lenū rō radicē z cubū rō milenū q̄ē 20 reī dimīnutas z cēsimū
dimīnutū radicē z cēsimū rē pueri 90 z cōs ū cōs cōs rō radicē 108

media pueniet. 10 Poe, pminori quantitate re. ypmedia 10 diui
sa pre. i mlca 10 diuisa pre mse. ueniet 100 diuisa pcelli q̃ diuid
pre ueiet 100 diuisa pcubi. h̃ eĩ maior quantus d̃ mlca mi
nore quantitate. s. re ise. i ueiet ces. i mlca media ise. s. 10 di
uisa pre ueiet 100 diuisa pcelli que adde. e celli er ces. i 100 diuisa
pcelli que epo. mlcatoi maioris q̃tumus. s. d 100 diuisa pcubi
ise. erqua mltate. puenit 10000 diuisa pcubi cubi. cplca g oia
q̃ pcubi cubi. re mltare pcubi cubi. sic mltare pcelli ces
ces. g simlmi 10000 diuisa pcubi cubi pcelli celli ces ueiet 10000 i
simlca uim celli. s quadti minois q̃tutus pcelli ces ces beim in
celli ces ces ces ueiet 100 ces ces. g ces ces ces ces. i 100 ces ces equa
10000 dragmus. Ponam imag quadti. a. c. celli ces ces. ces. i eit
unii qplas ipi ces ces. q. e mltat ces inse puenit ces ces
ces ces. i uiigam eide quadrato sup. d. e. que sit 100
ces ces. i q. d. c. e ces ces eit. c. e. 100 cui sup. d. e. q. e
100. ces ces. sit q. d. c. i. c. e. i q. ut dixi e. q ces ces ces ces. i 100
ces ces. equat 10000 g tota sup. a. e. eit 10000. q. educti. a. b. i. b. e.
h. e. q. e. b. c. i. b. e. puenit 10000 quor. sladdim q̃ dcti mediet. c.
e. q sit. c. k. habebit. q quadro nii. b. k. 1 400 q. b. k. e indire 1 400
d quasi aufert. c. k. que 40 remanebit. p quantitate. b. c. radix
1 400 diminuta 40 dragmis. h. b. c. e. ces ces. q. res e radix radi
cis ces ces. i nos possumus re pminori quantitate. eit uniq ipi mi
nor quantitas radix radicis ex radice 1 400 dragmaq diminuta in
40 q. media q̃tutis sunt 10 diuisa pre. i ei quadrati sunt 100 diui
sa pcelli q̃ dcti q̃ diuisi ipi eit 10000 diuisa pcelli ces. e. sup. a. e. 10000
recolligit. ex. a. b. i. b. e. i a. b. e ces ces. h e quadt q̃ dcti sidiuidam 10000
pcelli ces ueiet q̃tutis. b. e. p q̃ptitate q̃ dcti media ne q̃tutis q̃ te
h. b. e. e. q̃ti. b. f. i b. e. h. b. f. ei radix 1 400 i f. e. e 40 g medium
q̃tutis e radix radicis i radicem 1 400 i er 40 dragmis. manifesto q̃
tas eit radix alicui q̃dam q̃ sunt minori i media q̃tutis. h e radix
radicis radicis 1 400 minus 40 dragmis i radicis radix 1 400 i 40 dragmis.
Et sic dicat diuisa 10 in q̃tes. i sunt mltato minois pmaore sic
mltato medie ptis ise. i mltatus minois ise. i medie ptis ise. sic
sic mltato maois ptis ise. ponit pmu pminori pte dragmi. i
pmedia re. i pmaori celli. i hoc patet. q. mltus dragma q̃ minor
pte celli q. e maior pte e sic mltato medie ptis. s. re ise. d in mltus
dragmi ise. ueiet dragma et mltus re ise ueiet ces. i mltus celli sic
maore pte ise. i puenit ces ces. qui equat celli qui puenit ex re duc
ti ise. i dragm q̃ puenit ex dragma ducti ise. h q̃ ces ces equat celli.

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diminuta radice 4/16 dragme ueniet cas radix mille 100 et 1/4 min'
dice 4/6 ueniet 7 47 diminuta radice 1 12 4 ss cassi radix mille 10 et
radice 400 cassii et 1/4 diminuta radice 4/16 4 ueniet 10 res tm quer
1/4 m 20 res ueniut res 1/2 12 addite recte radice diminuta in radice 4/16 400
cassii ueniut res 1/2 12 diminute quinq; exactis remanebunt 1/2 12 remanet 10
res ut dixim'. Relinquunt' quinte milesime de 1/4 in radice 400 cassii
dicti et sic equal' diminute milesimi radius 4/16 in 20 res ipsis longitu
intellectis ostende 7 4 diminuta radice 1 12 4 quadrato medietatis ra
dicis. scz 12 4 remanebit radix 1 12 4 min' 4 dragme. cuius radicis acci
pe dimidium et medietatis radicis. scz 4 remanebit 4 diminuta radice
radicis 1 12 4 min' 40 dragme. et hoc est minor pars. Et similium'
maiorum partium inuenire potes. pupi dragmas 4 primi radicem rei 4 primi
pte rei et hec facias ut sic milesimo rei maioragmas sic milesimo radicis
radicem rei iste 4 ipsi primi et ut milesimo minoris pte inse 4 media inse
que sic milesimo maioris inse. milesimi minoris iste. scz rei ueniet cas milesi
mi media inse. scz radicem rei 4 ueniet res. sic habes cassii 4 rei que est milesi
mi dragme. scz maioris partis inse que milesimo est diuide per si fm alios
rei ut diuidas min' rei numero equa ueniet 1/2 cui quadrati adde dragmam
eius dragma 1/4 1 de cui radicem 1/2 4 remanebit pars minoris rei radix de 1/4 1 alibi
sufficiens min' medietate dragme. sic pminori pte cui radicem 4 primi
pte 4 eius radix radicis de 1/4 1 min' dragm' pminori non parte partis 4
dragma 4 pars eius partis pote similiter uocate nos 10 sic sic 1 et adde
mi ipsius cui par cui ueniet nos alias sic. 10 4 eius milesimi rei ipsius mi pars
tui partis sic milesimo de 1 1 10 que milesimi dragmas pte 4 ueniet res 4 mille 10
in radicem radicis de 1/4 1 min' 1/2 ueniet radix radicis cas cas 1/4 1 min' 1/2 cas
4 mille rei in radicem de 1/4 1 min' 1/2 ueniet radix cas 1/4 1 min' 1/2 rei 4 sic sic res 4
radicem radicis cas cas 1/4 1 min' 1/2 cas 4 radicem cas 1/4 1 min' 1/2 rei. que sic 10 dra
gme. pone una alibi pro min' medietate rei 4 radicem cas 1/4 1 que sic
radix radicis cas cas 1/4 1 min' medietate cas cui. et unum pro mille 4
milesimo 10 min' 1/2 rei 4 min' radicem cas. 1/4 1 habebit 100 4 cas 1/2 1 radix
cas cas 1/4 1 diminuta 10 rei 4 diminuta radice 400 cassii que capite mille
simi radicis radicis cas cas 1/4 1 min' medietate cas 1/4 1 que milesimo est radix
cas cas. 1/4 1 min' 1/2 cas. adde et una pars 1/2 cas 4 10 res 4 radicem 400 cassii.
4 mille una parte radicem cas cas 1/4 1 recte duo cas 4 100 dragme cubus
10 rei 4 radicem 400 cassii. Minoris et cui sic ut radius ex decem unus
ueniet cas 40 equales 4 rei 4 radici 12 4 diminuta et radicis 4 radicem 12 4
cassii que sic 1/2 12 4 radix 1/4 1 4 mille cas ipse ueniet 1/2 27 4 radix 1/4 78 dragme
alibi 40 sic ex cassii remanebit radix 1/4 78 diminute dragmis 1/2 12 et
radicem alibi ex medietate radicis. scz 1/2 12 4 radicis 1/4 1 remanebit 1/2 12 radix

$\frac{1}{2}\frac{1}{2}$ diminuta radice dicte. $\overline{\text{sc}}$ ine $\frac{1}{2}$ 12 radice $\frac{1}{2}\frac{1}{2}$ 781 $\overline{\text{s}}$ ſ ſiue maior
pars. ſiue minor uñ parte inuenimꝰ $\overline{\text{ee}}$ q diminuta radice dicte $\overline{\text{sc}}$
ine 40 radice $\frac{1}{2}$ 1 $\frac{1}{2}$ dragme. Vñ ſilue duas inuenire eandē 10
rem mebit̃, primā parte $\frac{1}{2}$ 2 radix dicte $\overline{\text{sc}}$ ine 40 radice $\frac{1}{2}$ 12 q
radix dicte $\overline{\text{sc}}$ ine $\frac{1}{2}$ 12 radice $\frac{1}{2}\frac{1}{2}$ 781 diminuta extrac omnib; radi
ce $\frac{1}{2}\frac{1}{2}$ 1 q̃ er nota q̃ ei dicam ſupꝰ radice radicis $\overline{\text{cōs}}$ $\overline{\text{cōs}}$ $\frac{1}{2}$ 1 mi
mediante $\overline{\text{cōs}}$. tunc mille radice accepta q̃ radice $\overline{\text{cōs}}$ $\overline{\text{cōs}}$ $\frac{1}{2}$ 1
mi mediante $\overline{\text{cōs}}$. Vñ ei mille inſe illa radix radicis, pueſ radix
$\overline{\text{cōs}}$ $\frac{1}{2}$ 1 ſubtracta in mediante $\overline{\text{cēſimo}}$.

Poſſum̃ eñ ad iſtã noñe medie pars exactis partib; q̃ſiue d 10 phie alii
unã pueſire utrũlibet ut ponam̃, puta media pte duas dragmas, q
prima radice rei. mille radice rei inſe ueñet res. mille duas
dragmas inſe ueñet $\frac{1}{2}$ dragme. Aggrega ei re. habebis re. $\frac{1}{2}$ dragmas
ſeptuor mille radicũ maioris partis iſte. q̃ maior pars eſt radix rei. $\frac{1}{2}$ dragmar.
Ex pueſ. q̃ mille radicũ minori parte in maiore pte. Et ſic media iſte mille
radice rei fiat minore pte in radice rei. $\frac{1}{2}$ dragmar ueñet radix
$\overline{\text{cōs}}$ $\frac{1}{2}$ rei q̃ faſt $\frac{1}{2}$ dragmis. ſi mille radicũ duar dragmar in ſe mille ue
iſte ueñet $\overline{\text{cōs}}$ et $\frac{1}{2}$ res equales 16 dragmis. Dimidia igit res erit q̃ mille
iſte et adde 8 dragmis 16 erit 10 d. q̃ radice abice medietate radicis re
manebit radix 10 minꝰ 2 dragmis. q̃ quãtitate rei q̃ radix 8 minor
pars q̃ poſſum̃ ei radice rei pars uñ minor q̃ radix rei et $\frac{1}{2}$ dragmar
eſt radix radicis 10 2 dragmar et media pars 2 dragme. et ip habes
partes inuente radicis 10 eſt, ppoño cuiuſlibet q̃ad 10 ſic, ppoño 2 dragmar
ad id q̃ pueſt medietate ptis q̃ponam̃ $\overline{\text{ee}}$ re. uñ mille radicũ in ipſis $\overline{\text{cōs}}$
res eſt ſic mille radicũ 2 10 et mille radicũ re in radice 10 minꝰ 2 dragmis radice
cor in accepta ueñet radix 10 $\overline{\text{cēſimi}}$ $\overline{\text{cōs}}$ minꝰ 2 $\overline{\text{cēſimis}}$ radice in accep
ta et mille rei 2 ueñet 2 res et mille radicũ in re in radice 10 et duas dra
gmas ueñet radix radicis 10 $\frac{1}{2}$ $\overline{\text{cēſimi}}$ $\overline{\text{cōs}}$ et duor $\overline{\text{cēſimi}}$ q̃ oia eqũ 10
dragmis abice et abutãtur pte et relinquit̃ 10 minꝰ 2 rebꝰ equales radi
radicis 10 $\overline{\text{cēſimi}}$ $\overline{\text{cōs}}$ minꝰ 2 $\overline{\text{cēſimis}}$ radicis radicis 10 $\overline{\text{cēſimi}}$ $\overline{\text{cōs}}$. et $\overline{\text{cēſimi}}$
mille et 10 minꝰ 2 rebꝰ iſte ueñet $\frac{1}{2}$ 00 et $\frac{1}{2}$ $\overline{\text{cēſimi}}$ minꝰ 80 rebꝰ et mille radice
10 $\overline{\text{cēſimi}}$ $\overline{\text{cēſimis}}$ minꝰ 2 $\overline{\text{cēſimis}}$ accepta in radice et radice 10 $\overline{\text{cēſimi}}$ $\overline{\text{cōs}}$ et
$\overline{\text{cēſimi}}$ accepta ſimile in radice iſte et erit 8 $\overline{\text{cōs}}$ et radix 80 $\overline{\text{cēſimi}}$ $\overline{\text{cōs}}$ q̃ſt
$\frac{1}{2}$ 00 dragmis et $\frac{1}{2}$ centeſimis diminutis 80 rebꝰ. adde q̃ ubi $\frac{1}{2}$ pñ 80 res et olle
abutãtur pte $\frac{1}{2}$ $\overline{\text{cēſimi}}$ remanebũt 80 res et radix 80 $\overline{\text{cēſimi}}$ $\overline{\text{cōs}}$ et $\frac{1}{2}$ $\overline{\text{cōs}}$ equales
$\frac{1}{2}$ 00 dragmis. redige q̃ radice 80 $\overline{\text{cēſimi}}$ $\overline{\text{cōs}}$ et $\frac{1}{2}$ $\overline{\text{cōs}}$ ad $\overline{\text{cēſimi}}$ et q̃ ut mille
ei p radice $\frac{9}{2}\frac{9}{4}\frac{9}{6}$ minꝰ $\frac{1}{16}$ dragme q̃ mille 80 res in radice $\frac{9}{2}\frac{9}{4}\frac{9}{6}$ minꝰ $\frac{1}{16}$
ueñet radix 12 4 $\overline{\text{cēſimi}}$ minꝰ 4 rebꝰ q̃s $\overline{\text{ee}}$ $\overline{\text{cēſimi}}$ et mille $\frac{1}{2}$ 00 p radice $\frac{9}{2}\frac{9}{4}\frac{9}{6}$ minꝰ
$\frac{1}{16}$ ueñet radix $\frac{1}{2}$ 12 4 minꝰ 4 dragmis q̃ equãtur $\overline{\text{cēſimi}}$ et radix 12 4 $\overline{\text{cēſimi}}$

sublatis vñ ℓ reb̄z dimidia & medietate 12 ℓ cēsuū minus ℓ reb̄z ueĩet
vndec ℓ 21 mīn ℓ 12 m'ca ea vnde ueĩet ℓ 27 mīn vndec ℓ 781 sup̄q
adde vndecim 12 ℓ mīn 12 ℓ & sca sup vndecim 12 ℓ & duplū vndec ℓ 781
ueĩet ℓ 12 vndec ℓ 781 & sup vndec abice vndecim ℓ 21 mīn ℓ 12 remanebūt
dragiū. ℓ 12 & vltra dragmau ℓ 12 vndec ℓ 781 mīn vndec ℓ 21 &
quātitate rei & hēs pāg medij. Volo demōstrare quō accepta vndec
vndecies 10 cēsuū cēsus mīn & cēsibz & accepta vndec vndecies 10 cēsuū
cēs & cēsuū mīcēt isle. sit itaq; linea a b. vndec accepta vndecies 10
cēsuū cēs mīn & cēsibz. et b g. sit vndec accepta tendecies 10 cēsuū
censuū & cēsuū. & uolumꝰ scire quantū uenit ex a g. quātum
ex ducta in se. Jam scis quod quadr̄a ſ̄tum a b & b g. duplo a b.
i b g. ergo quadr̄o ſ̄tus a g. & mīcent a b.
isle. uicēs vndecies 10 cēsuū cēs mīn & cēsibz. ducunt
b g. isle uicēs vndecies 10 cēsuū cēs it & cēs aggra.
Jn simul uicēs & vndecies 10 cēsuū cēs ꝙs una vndecies 10 cēsuū cēs &
mīca quadratū ſ̄tum a b. i quadr̄o quātum b g. & bis quadratū
mīcat ergo ex a b. i b g. si mīcent quadrata a b. i quadr̄o b g. uenit 16
cēs & ſ̄. si mō & mīcat vndecies 10 cēsuū cēs p̄dicta 10 cēsuū cēs uenit
10 cēs cēs. & & mīcēt 10 cēs addm̄ duos cēs diminutos uenit ℓ cēs cēs.
diminuti q̄bz ereptis ex 10 cēsibz cēs remanebūt 16 cēs cēs ſ̄tus vndec. s. ℓ
cēs eādē q̄ueāt ex a b. i b g. ſ̄tus duplū laddam̄ sup vndecies 10 cēsuū
cēs & bis uenit una vndecies 10 cēsuū cēs vndecies 10 cēsuū cēs p̄mīcent ſ̄tum a g. & isle
& hoc uolumꝰ demōstrare.
Et si decem̄ minus 10 ītrias p̄ter ternarium p̄ter eritq; duas vndecies
& sup minores addm̄ duas vndecies & q̄ueniēt sue equalia. Ac
primum p̄ter & mīn & ternarium & & vndecies 10 & vndecies
vndecies 10 & sup & addm̄ sup mīn & vndecies & & rabies edd & &
& remanebūt & vndecies diminutum vndecies 10 dragmau & ℓ reb̄z & addm̄ si
& mīn & vndecies & isti una vndecies 10 mīn ℓ reb̄z & & mīn & vndecies
quedā mīn ℓ reb̄z & esse & mīn vndecies 10 dragmau & ℓ reb̄z. Tolle
abutrūq; p̄ter & adde utrīq; p̄ter & vndecies 10 dragmau ℓ reb̄z & remanebūt
vndecies 10 mīn ℓ reb̄z vndecies 10 & ℓ reb̄z esse reb̄z. ayles quēlibet utrīq;
p̄ter isle uicēs & remanebūt & & isle ℓ cēs & remanebūt vndecies 10 mīn
ℓ reb̄z vndecies 10 & ℓ reb̄z isle uenit ℓ 10 vndecies 1600 dragmau mīn 6 ℓ
cēsibz ꝙs mīcent sic sit ducat̄ p̄mū vndecies 10 mīn ℓ reb̄z isle uenit 10 mīn
ℓ reb̄z. & ducat vndecies 10 & ℓ & isle uenit 10 ℓ reb̄z agga ei & & ℓ 10 dragm.
mīca vndecies 10 mīn ℓ reb̄z vndecies 10 & ℓ reb̄z. & uenit una vndecies ℓ 100
dragmau mīn 16 cēsibz duplicat̄ & & vndecies ℓ 100 dragmau mīn 16 &
cēsibz ꝙs una vndecies 1600 dragmau mīn 6 ℓ censibz & isle ꝙsti mīcant

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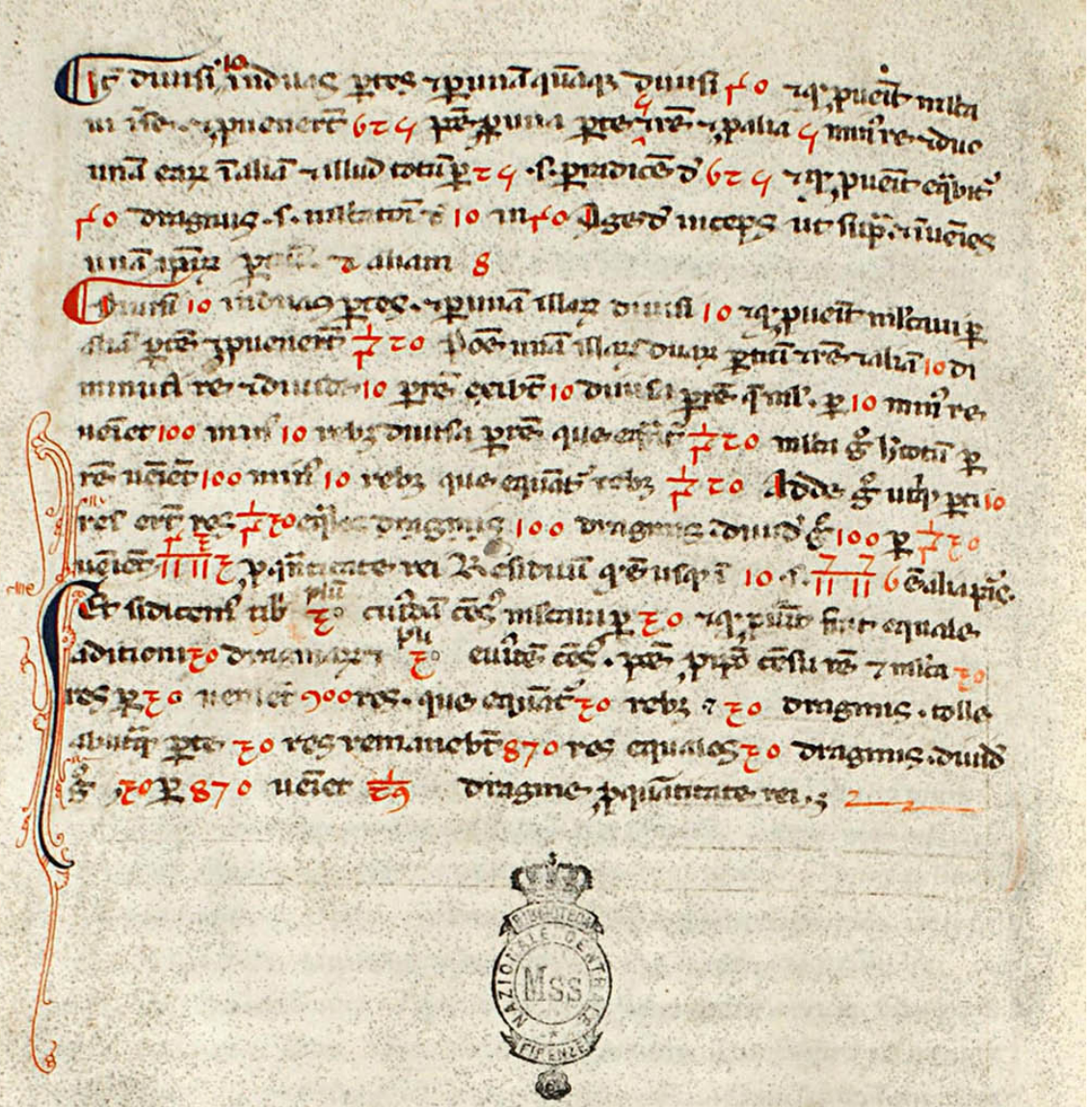
ipse dicitur esse l.

plus & ē duūdē · a · p̄ · b · pueīt reg · rd tagna · rdngna · rē duūdiē ·
a · p̄ · c · pueīt · dūi · rl dico q̄ mlīatō rei · comagn̄ p̄dē · rdngnā &
equal' o & gtatī eop̄dē · Vbi gr̄ē q̄ aggntē · quid' eop̄ pueīt · rres
· rdē q · r pueīt q̄ mlīatō uml' tp̄ p̄tiū ī alia q̄ ē duūt dngna ·
rdngnā pueīt | · rē reī dnar · pueīt | · rlicḥ̄ · rē duct | qđ &
ē dnar · ī rē pueīt reg · silr̄ ē duct | q̄ · ē rē · ī rdē pueīt dē · rlicḥ̄ ·
rē · rē · dnar · p̄ mlīatē rei · comagne · ī dē · rdngnā · sicut hūmōi
pagntē eop̄ · rpōt · q̄ h̄ mamfesta & · rappl̄ · dicem̄ duūsi | o ī duas
pres · rp̄na q̄ q̄ tp̄ duūsi | o · rp̄uenerē 1/2 6 Age · ī hūc sm q
ī sl̄imli q̄ s supī dicta ē · ī uēies · ul' p̄ē p̄na p̄tiū · ī minue sre
tp̄alia & · rē · rmlēa una tp̄ ī alia · rillud totū p̄ 1/2 6 · rq̄ pueīt opp̄
ē | o o q̄ pueīt ē duct | o ī se · rage sm algbr · ī uēies rē ē michil ·
q̄ p̄na tp̄ duaē p̄tiū eīt · ī alia & · si ponē una tlīa duaē
p̄tiū · ī rē · alia & mīn̄ re · · rmltabīt 1/2 rē ng mūl re · · rillud totū
ducem̄ p̄ 1/2 6 q̄ p̄uenīt eīt equale | oo dragnus · Vñ ē agēm sm algbr ·
Thus ī uēiem̄ rē ē 6 q̄ · addas ē · ī · rē tūs d & uēiet q̄ p̄na p̄tiū & p̄alia ·
Et sī dicem̄ tres duas pres d | o · rp̄na q̄ q̄ tp̄ duūsi | o · rp̄uenerē
1/2 12 q̄ | o se d | o a ē 1/2 d 1/2 | 2 ert 1/2 6 q̄ · ī qua p̄ōuc & ē | o ad | o ī eād nūc
q̄ pueīt q̄ duūdūt | o ī duas pres · rduūdūt | o p̄na q̄ q̄ tp̄ duaē
p̄tiū · ad nūm q̄ pueīt · rduūsloē | o ī eisdē pres uel ī seūs d mōtra
bo · ut dic · duūsi | o ī duas pres · rduūsi | o p̄na q̄ q̄ tp̄ · p̄uene-
rē 1/2 6 Age · ī hūc ut supdictū ē · ī uēies una p̄ē d | o ē · alia &
· rut d mostrem̄ q̄ p̄mūsit ī hūc q̄one · Sint duo nūi · a · b · rduūdiē ·
d · duas p̄tes q̄ sit · c · d · rduūdat · a · p̄ · c · ueīet · e · · rduūdat · a · p · d ·
ueniz · f · rduūdat · b · p · c · ueīet · g · rduūdat · b · p · d · ueīet · h · dico
q̄ ē sic · a · ad · b · ita · e · f · ad nūos · g · h · q̄ sic p̄uit · p̄ ē duūdieūr ·

a · p · c · pueīt · e · g · · e · c · ī · e · pueīt · a · Similiter aī duū
ditur · b · p · c · pueīt · g · g · · e · c · ī · g · pueīt · b · ez · e · c · in ·
e p̄ueīt · a · q̄ ē sic · a · ad · b · ita · e · ad · g · similiter q̄ ēim
nūi · f · h · mlīat · p · d · simūr nūos · a · b · q̄ ē sic · a · ad · b · ita · f · ad · h ·
sīut eīm sic · a · ad · b · ita · e · ad · g · g ē sic · a · ad · h · ita nūi · e · f · ad
nūos · g · h · Vñ si · a · ēim | o · · b e o · rduūdiē ī duas pres · ī una
q̄ q̄ tp̄ duūdat | o · rueīat nūi · e · f · rduūdiē | o p̄ens d pres de | o
rueīat nūi · g · h · qui sūt 1/2 12 ut p̄ōtū sīut · eīt ita p̄ ut demostrauī
ē sic · a · ad · b · ita · e · f · ad · g · h · · ad 1/2 12 ez · a · e · b · ē · medietas ·
p̄ nūi · e · f · ē nūos · g · h · sic · ē 1/2 12 sic 1/2 · · 1/2 6 ut p̄ōia · rūnos · b · eīt
plus ul' minus · sep̄ ī qui p̄ōtē · ēnt | o · ad ipm nīus ī eād ēnt nūi ·
e · f · ad nūos · g · h · Vñ pres sm hūc mod ī oīb; similib; q̄oīb; p̄ced ·
& sīus sine ī uēione · nīgn · e · f · ī mūenone · duaē p̄tiū d | o · dlīr ·



Item diuisi 10 in duas partes et per unam quamque diuisi 40 et quod prouenit multa
ui in se et prouenerunt 625 partes per una parte 5 rem et per alia 5 minus re et duo
unam earum in aliam et illud totum per 25 s. per radicem de 625 et quod prouenit equabitur
40 dragmis s. multa tamen de 10 in 40 Age de inceps ut supra et inuenies
unam ipsarum partium et aliam 8

Diuisi 10 in duas partes et per unam illarum diuisi 10 et quod prouenit multa ui per
aliam partem et prouenerunt $\frac{1}{4}$ 20 Pone unam illarum duarum partium rem et aliam 10 di
minuti re et diuide 10 per rem exibunt 10 diuisa per rem que multa per 10 minus re
ueniet 100 minus 10 rebus diuisa per rem que equatur $\frac{1}{4}$ 20 multa ergo hec totum per
rem ueniet 100 minus 10 rebus que equantur rebus $\frac{1}{4}$ 20 Adde ergo utrique parti 10
res erunt res $\frac{1}{4}$ 20 equales dragmis 100 dragmis diuide ergo 100 per $\frac{1}{4}$ 20
ueniet $\frac{4}{11}$ $\frac{3}{11}$ 3 pro quantitate rei Residuum quod est usque in 10 s. $\frac{7}{11}$ $\frac{7}{11}$ 6 est alia pars.

Et si dicemus tibi plus 30 cuiusdam census multa ui per 30 et quod prouenit fuit equale
aditioni 30 dragmarum et plus 30 cuiusdam census. Pone pro ipso censu rem et multa 30
res per 30 ueniet 900 res. que equantur 30 rebus et 30 dragmis. tolle
ab utraque parte 30 res remanebunt 870 res equales 30 dragmis. diuide
ergo 30 per 870 ueniet $\frac{1}{29}$ dragme pro quantitate rei. 2

BIBLIOTECA NAZIONALE CENTRALE FIRENZE Mss

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