

geometricarum doctrina. In progressionē qua-  
libet geometrica productum ex primo in ul-  
timum terminum semper æquale est produ-  
cto ex secundo & penultimo, aut etiam al-  
teri cuilibet producto ex duobus terminis  
a primo & ultimo æqualiter distantibus. Sit  
progressio  $a, ar, ar^2, ar^3$ , in qua commu-  
nis multiplicator aut divisor *ratio communis*  
dici solet, sitque  $y$ , ultimus terminus, erunt

quatuor ultimi termini  $y, \frac{y}{r}, \frac{y}{r^2}, \frac{y}{r^3}$ , ut patet  
ex natura progressionis geometricæ. Est autem

$$a \times y = ar \times \frac{y}{r} = ar^2 \times \frac{y}{r^2} = ar^3 \times \frac{y}{r^3} \text{ \&c.}$$

Præterea summa progressionis geometricæ,  
dempto primo termino, æqualis est summæ  
omnium terminorum, dempto ultimo, per  
communem rationem multiplicatæ. Nam  $ar$

$$\times ar^2 \times ar^3 \times \text{\&c.} \times \frac{y}{r^3} \times \frac{y}{r^2} \times \frac{y}{r} \times y =$$

$$r \times (a \times ar \times ar^2 \times \text{\&c.} \times \frac{y}{r^4} \times \frac{y}{r^3} \times \frac{y}{r^2} \times \frac{y}{r}). \text{ Quare}$$

si progressionis summa dicatur  $s$ , erit  $s - a$   
 $= s - y \times r$  hoc est,  $s - a = sr - yr$ , vel  
 $rs - s = yr - a$ , &  $s = \frac{yr - a}{r - 1}$ . Quamvis

autem ex arithmeticarum operationum natu-  
ra facile pateat qua ratione ad hunc ulti-  
mum valorem perveniatur, res tamen ma-  
gis