Quod autem jam invenimus, libet etiam, in sequentibus aliquot propositionibus, mutata aliquantulum forma proponere. Et primo quidem qui id possit numeris absolutis quam proxime designari, & deinde etiam lineis rectis.

PROP. CLXXXXI. *Problema.*

PRopositum sit inquirere, quantus sit terminus □ (tabellæ prop. 189.) in numeris absolutis quam proxime.

Quo facilius res succedat, progressionis (ibidem repertæ) termini $\frac{1}{2}\square.\ 1.\ \square.\ \frac{3}{2}.\ \frac{4}{3}\square.\ \frac{3\times5}{2\times4}.\ \frac{4\times6}{3\times5}\square.\ \frac{3\times5\times7}{2\times4\times6}.$ &c.
dicantur, $\alpha,\ a,\ \beta.\ b.\ \gamma.\ c.\ \delta.\ d.$ &c.
Est autem $1.2::\alpha.\beta.$ Et $2.3::a.b.$ Et $3.4::\beta.\gamma.$ Et $4.5::b.c.$ Et $5.6::\gamma.\delta.$ Et $6.7::c.d.$ &c.

Hoc est, $\frac{\beta}{\alpha}=\frac{2}{1},\ \frac{b}{a}=\frac{3}{2},\ \frac{\gamma}{\beta}=\frac{4}{3},\ \frac{c}{b}=\frac{5}{4},\ \frac{\delta}{\gamma}=\frac{6}{5},\ \frac{d}{c}=\frac{7}{6},$ &c.

hoc de rationibus $\frac{b}{\beta}, \frac{\beta}{a}, \frac{a}{\alpha}$ non est ostensum sed à se supponitur.

Ideoq; (cum rationes continue multiplicantes perpetuo decrescant) erit

$$\frac{\beta}{a}\begin{cases}\text{minor duarum}\ \left\{\frac{a}{\alpha}\times\frac{\beta}{a}=\frac{\beta}{\alpha}=\frac{2}{1}\right. \\ \text{major duarum}\ \left\{\frac{\beta}{a}\times\frac{b}{\beta}=\frac{b}{a}=\frac{3}{2}.\right.\end{cases}\ \text{Ideoq;}\ \begin{cases}\text{minor quam}\ \sqrt{\frac{2}{1}}=\sqrt{1\frac{1}{1}}. \\ \text{major quam}\ \sqrt{\frac{3}{2}}=\sqrt{1\frac{1}{2}}.\end{cases}$$

$$\text{Et propterea}\ \beta=a\times\frac{\beta}{a}=\square\begin{cases}\text{minor quam}\ 1\sqrt{2}=1\sqrt{1\frac{1}{1}}. \\ \text{major quam}\ 1\sqrt{\frac{3}{2}}=1\sqrt{1\frac{1}{2}}.\end{cases}$$

$$\text{Item}\ \frac{\gamma}{b}\begin{cases}\text{minor duarũ}\ \left\{\frac{b}{\beta}\times\frac{\gamma}{b}=\frac{\gamma}{\beta}=\frac{4}{3}\right. \\ \text{major duarũ}\ \left\{\frac{\gamma}{b}\times\frac{c}{\gamma}=\frac{c}{b}=\frac{5}{4}.\right.\end{cases}\ \text{Ideoq;}\ \begin{cases}\text{minor quam}\ \sqrt{\frac{4}{3}}=\sqrt{1\frac{1}{3}}. \\ \text{major quam}\ \sqrt{\frac{5}{4}}=\sqrt{1\frac{1}{4}}.\end{cases}$$

ratio β ad α componitur ex rat. β ad a et a ad α. jam quia ponit minorem esse β ad a quam a ad α, Erit ideo β ad a minor e duabus rationibus quae componunt rat. β ad α hoc est 2 ad 1. ideoque $\frac{\beta}{a}$ minor quam $\sqrt{\frac{2}{1}}$.

Et