

Book 7

Proposition 38

If a number has any part whatever then it will be measured by a number called the same as the part.

A $\overline{\hspace{2cm}}$

B $\overline{\hspace{1cm}}$

C $\overline{\hspace{1.5cm}}$

D $\overline{\hspace{0.5cm}}$

For let the number A have any part whatever, B . And let the [number] C be called the same as the part B (*i.e.*, B is the C th part of A). I say that C measures A .

For since B is a part of A called the same as C , and the unit D is also a part of C called the same as it (*i.e.*, D is the C th part of C), thus which(ever) part the unit D is of the number C , B is also the same part of A . Thus, the unit D measures the number C as many times as B (measures) A . Thus, alternately, the unit D measures the number B as many times as C (measures) A [Prop. 7.15]. Thus, C measures A . (Which is) the very thing it was required to show.