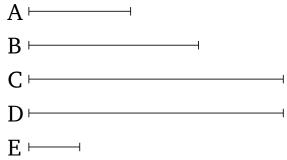
Book 7 Proposition 16

If two numbers multiplying one another make some (numbers) then the (numbers) generated from them will be equal to one another.



Let A and B be two numbers. And let A make C (by) multiplying B, and let B make D (by) multiplying A. I say that C is equal to D.

For since A has made C (by) multiplying B, B thus measures C according to the units in A [Def. 7.15]. And the unit E also measures the number A according to the units in it. Thus, the unit E measures the number A as many times as B (measures) C. Thus, alternately, the unit E measures the number B as many times as A (measures) C [Prop. 7.15]. Again, since B has made D (by) multiplying A, A thus measures D according to the units in B [Def. 7.15]. And the unit E also measures B according to the units in it. Thus, the unit E measures the number E as many times as E (measures) E E as many times as E (measures) E E E and E E and E are qual number of times. Thus, E is equal to E (Which is) the very thing it was required to show.