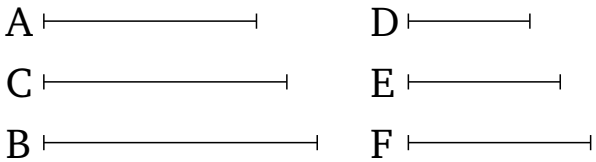
Book 8
Proposition 26

Similar plane numbers have to one another the ratio which (some) square number (has) to a(nother) square number.



Let A and B be similar plane numbers. I say that A has to B the ratio which (some) square number (has) to a(nother) square number.

For since A and B are similar plane numbers, one number thus falls (between) A and B in mean proportion [Prop. 8.18]. Let it (so) fall, and let it be C. And let the least numbers, D, E, F, having the same ratio as A, C, B have been taken [Prop. 8.2]. The outermost of them, D and F, are thus square [Prop. 8.2 corr.]. And since as D is to F, so A (is) to B, and D and F are square, A thus has to B the ratio which (some) square number (has) to a(nother) square number. (Which is) the very thing it was required to show.