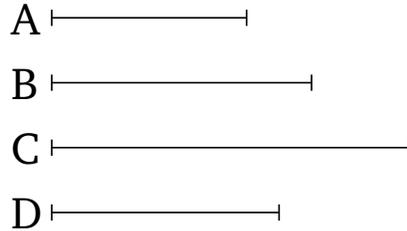


Book 9

Proposition 5

If a cube number makes a(nother) cube number (by) multiplying some (number) then the (number) multiplied will also be cube.



For let the cube number A make the cube (number) C (by) multiplying some number B . I say that B is cube.

For let A make D (by) multiplying itself. D is thus cube [Prop. 9.3]. And since A has made D (by) multiplying itself, and has made C (by) multiplying B , thus as A is to B , so D (is) to C [Prop. 7.17]. And since D and C are (both) cube, they are similar solid (numbers). Thus, two numbers fall (between) D and C in mean proportion [Prop. 8.19]. And as D is to C , so A (is) to B . Thus, two numbers also fall (between) A and B in mean proportion [Prop. 8.8]. And A is cube. Thus, B is also cube [Prop. 8.23]. (Which is) the very thing it was required to show.