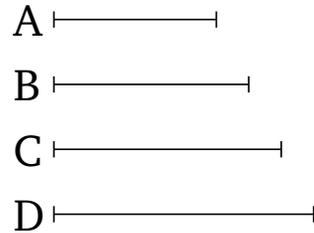


## Book 8

### Proposition 23

If four numbers are continuously proportional, and the first is cube, then the fourth will also be cube.



Let  $A$ ,  $B$ ,  $C$ ,  $D$  be four continuously proportional numbers, and let  $A$  be cube. I say that  $D$  is also cube.

For since two numbers,  $B$  and  $C$ , are in mean proportion to  $A$  and  $D$ ,  $A$  and  $D$  are thus similar solid numbers [Prop. 8.21]. And  $A$  (is) cube. Thus,  $D$  (is) also cube [Def. 7.21]. (Which is) the very thing it was required to show.