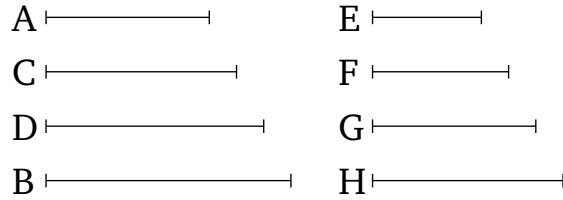


# Book 8

## Proposition 27

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



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

For since  $A$  and  $B$  are similar solid (numbers), two numbers thus fall (between)  $A$  and  $B$  in mean proportion [Prop. 8.19]. Let  $C$  and  $D$  have (so) fallen. And let the least numbers,  $E$ ,  $F$ ,  $G$ ,  $H$ , having the same ratio as  $A$ ,  $C$ ,  $D$ ,  $B$ , (and) equal in multitude to them, have been taken [Prop. 8.2]. Thus, the outermost of them,  $E$  and  $H$ , are cube [Prop. 8.2 corr.]. And as  $E$  is to  $H$ , so  $A$  (is) to  $B$ . And thus  $A$  has to  $B$  the ratio which (some) cube number (has) to a(nother) cube number. (Which is) the very thing it was required to show.