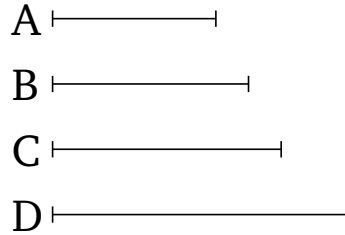# Book 8
Proposition 7

If there are any multitude whatsoever of [continuously] proportional numbers, and the first measures the last, then (the first) will also measure the second.

A ⊢————⊣

B ⊢————⊣

C ⊢————⊣

D ⊢————⊣

Let A, B, C, D be any number whatsoever of continuously proportional numbers. And let A measure D. I say that A also measures B.

For if A does not measure B then no other (number) will measure any other (number) either [Prop. 8.6]. But A measures D. Thus, A also measures B. (Which is) the very thing it was required to show.