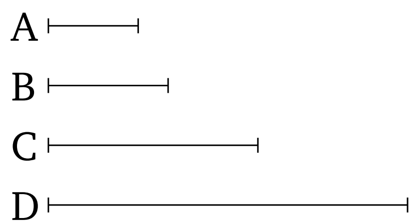
Book 9
Proposition 32

Each of the numbers (which is continually) doubled, (starting) from a dyad, is an even-times-even (number) only.



For let any multitude of numbers whatsoever, B, C, D, have been (continually) doubled, (starting) from the dyad A. I say that B, C, D are even-times-even (numbers) only.

In fact, (it is) clear that each [of B, C, D] is an even-times-even (number). For it is doubled from a dyad [Def. 7.8]. I also say that (they are even-times-even numbers) only. For let a unit be laid down. Therefore, since any multitude of numbers whatsoever are continuously proportional, starting from a unit, and the (number) A after the unit is prime, the greatest of A, B, C, D, (namely) D, will not be measured by any other (numbers) except A, B, C [Prop. 9.13]. And each of A, B, C is even. Thus, D is an even-time-even (number) only [Def. 7.8]. So, similarly, we can show that each of B, C is [also] an even-time-even (number) only. (Which is) the very thing it was required to show.