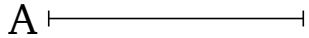
Book 9
Proposition 33

If a number has an odd half then it is an even-time-odd (number) only.



For let the number A have an odd half. I say that A is an even-times-odd (number) only.

In fact, (it is) clear that (A) is an even-times-odd (number). For its half, being odd, measures it an even number of times [Def. 7.9]. So I also say that (it is an even-times-odd number) only. For if A is also an even-times-even (number) then it will be measured by an even (number) according to an even number [Def. 7.8]. Hence, its half will also be measured by an even number, (despite) being odd. The very thing is absurd. Thus, A is an even-times-odd (number) only. (Which is) the very thing it was required to show.