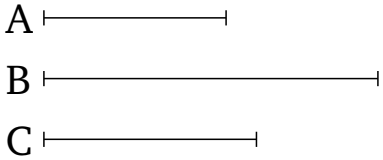
Book 9
Proposition 30

If an odd number measures an even number then it will also measure (one) half of it.



For let the odd number A measure the even (number) B. I say that (A) will also measure (one) half of (B).

For since A measures B, let it measure it according to C. I say that C is not odd. For, if possible, let it be (odd). And since A measures B according to C, A has thus made B (by) multiplying C. Thus, B is composed out of odd numbers, (and) the multitude of them is odd. B is thus odd [Prop. 9.23]. The very thing (is) absurd. For (B) was assumed (to be) even. Thus, C is not odd. Thus, C is even. Hence, A measures B an even number of times. So, on account of this, (A) will also measure (one) half of (B). (Which is) the very thing it was required to show.