

## Book 9

### Proposition 29

If an odd number makes some (number by) multiplying an odd (number) then the created (number) will be odd.



For let the odd number  $A$  make  $C$  (by) multiplying the odd (number)  $B$ . I say that  $C$  is odd.

For since  $A$  has made  $C$  (by) multiplying  $B$ ,  $C$  is thus composed out of so many (magnitudes) equal to  $B$ , as many as (there) are units in  $A$  [Def. 7.15]. And each of  $A$ ,  $B$  is odd. Thus,  $C$  is composed out of odd (numbers), (and) the multitude of them is odd. Hence  $C$  is odd [Prop. 9.23]. (Which is) the very thing it was required to show.