

Book 9

Proposition 21

If any multitude whatsoever of even numbers is added together then the whole is even.



For let any multitude whatsoever of even numbers, AB , BC , CD , DE , lie together. I say that the whole, AE , is even.

For since everyone of AB , BC , CD , DE is even, it has a half part [Def. 7.6]. And hence the whole AE has a half part. And an even number is one (which can be) divided in half [Def. 7.6]. Thus, AE is even. (Which is) the very thing it was required to show.