

Book 9 Proposition 26

If an odd (number) is subtracted from an odd number then the remainder will be even.



For let the odd (number) BC have been subtracted from the odd (number) AB . I say that the remainder CA is even.

For since AB is odd, let the unit BD have been subtracted (from it). Thus, the remainder AD is even [Def. 7.7]. So, for the same (reasons), CD is also even. And hence the remainder CA is even [Prop. 9.24]. (Which is) the very thing it was required to show.