Book 9 Proposition 24

If an even (number) is subtracted from an (other) even number then the remainder will be even. ${\sf A}$ ${\sf C}$ ${\sf B}$

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

For since AB is even, it has a half part [Def. 7.6]. So, for the same (reasons), BC also has a half part. And hence the remainder [CA has a half part]. [Thus,] AC is even. (Which is) the very thing it was required to show.