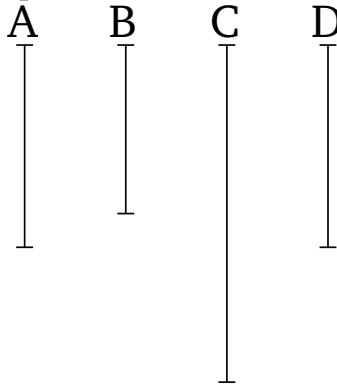# Book 7
Proposition 25

If two numbers are prime to one another then the number created from (squaring) one of them will be prime to the remaining (number).

Let A and B be two numbers (which are) prime to one another. And let A make C (by) multiplying itself. I say that B and C are prime to one another.

A   B   C   D

For let D be made equal to A. Since A and B are prime to one another, and A (is) equal to D, D and B are thus also prime to one another. Thus, D and A are each prime to B. Thus, the (number) created from (multilying) D and A will also be prime to B [Prop. 7.24]. And C is the number created from (multiplying) D and A. Thus, C and B are prime to one another. (Which is) the very thing it was required to show.