

## Something very old and very cool! From Euclid, the Father of Geometry

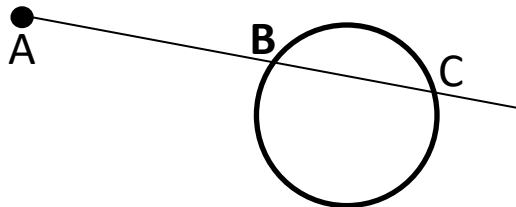
Here is a nice bit of geometry that is well over 2500 years old. It was written down by a person called Euclid. Euclid inspired Ada Lovelace many hundreds of years later who worked out how a computer could work.

If you want to do this then you will need some paper and a pencil, a pair of compasses (or something to draw round to draw a circle) and a ruler.

Draw a circle.

Draw a dot somewhere outside the circle. Draw a line from the dot that crosses through the circle.

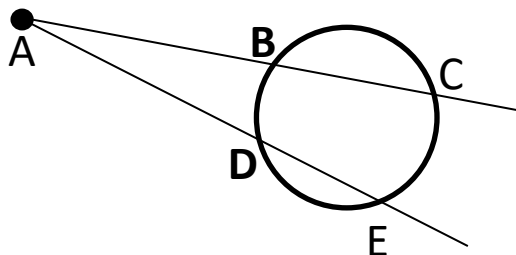
Like the diagram shows.



Next, measure along the line from the dot (A) to the edge of the circle and from the dot to the far edge of the circle. (Recommend using millimetres.)

Multiply these distances together. So, find  $AB \times AC$  and write that number down.

Now, draw another straight line from the same dot that goes across the circle:



Do the same thing again, so in this diagram, you are going to measure from A to D and from A to E and multiply those numbers together. So, find  $AD \times AE$  and write that number down.

You should find that for any sized circle, no matter where you put the dot for any two lines that cross the circle the answers are the same.  $AB \times AC = AD \times AE$

Nice! No idea what that is any use for but it is cool!

Nick