



## Euclidian Algebra and Calculation 2

## Short activity

### Teacher notes

Content:

- Similar triangles
- Circle theorems
- Algebraic manipulation

Possible uses:

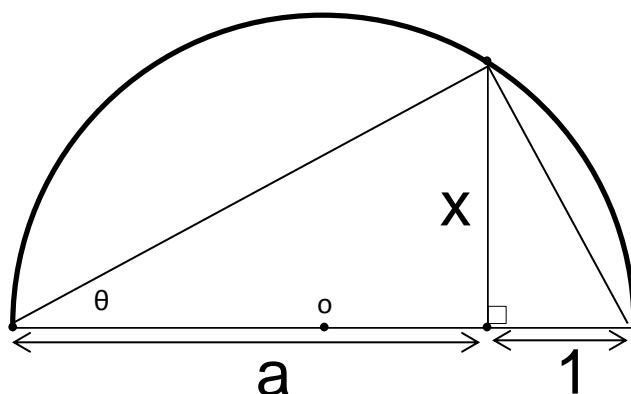
- As an extension task for more able pupils
- As a challenge task for individuals or pairs of pupils

Resource options:

- PowerPoint file for whole class projection
- Worksheet for individual pupils
- Geogebra file

### Answers

If pupils need a hint, mark angle  $\theta$  on the diagram and ask what other angles they are then able to label.



This is an ancient Greek method for finding the square root of a given value:  $a = x^2$  or  $x = \sqrt{a}$

Using Dynamic Geometry Software to demonstrate this once pupils have shown that it is true can be helpful. This is one of those constructions that seems difficult to believe, even after proving it!