



Euclidian Algebra and Calculation 2

Short activity

The Ancient Greeks were skilled mathematicians who devised interesting number and algebra problems which were to be solved using only a pencil, a straight edge and a pair of compasses.

Numerical values were represented by	straigh	t lines of a giv	ven length.
For example, if a length such as this then a line twice its length	is -		said to be of length '1', would have a value of '2'.
Random lengths are used to represent	unknov		ļ.
a		b 	

In the following diagram, a semi-circle is shown with centre o.

Lengths of a, x and 1 are marked, with the diameter being a + 1 and x being the perpendicular height of the semi-circle a distance of 1 unit from the circumference.

What is the unknown value 'x' in terms of a?

