Name: _____ 5-a-day Higher Plus

21st April

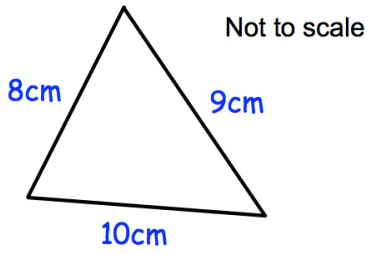
Corbettmaths

Show the equation
$x^3 + 6x = 25$
has a solution between 2 and 3.

Show the equation
$x^3 + 6x = 25$
can be rearranged to give

$$x = \sqrt[3]{25 - 6x}$$

Starting with $x_0 = 0$
use the iteration formula
$$x_{n+1} = \sqrt[3]{25 - 6x_n}$$
three times to find an estimate for the solution of $x^3 + 6x = 25$



Find the area of the triangle

The graph $y = x^2 + 9x - 10$ has a line of symmetry.

Write down the equation of the line of symmetry.