4th December

Corbettmaths

The equation

$$x^3 + 2x^2 = 40$$

has a solution between 2 and 3.
Find this solution to 1 decimal place.

x	$x^3 + 2x^2$	Comment
2.8	37.632	too low
2.9	41.209	too high
2.85	39.394	too low

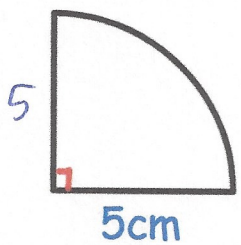
↓ ↓ ↑

2.8 2.85 2.9

2.9

The distance between London and New York is 5,567,000 metres.
Write this number in standard form.

5.567×10^6



Work out the perimeter.
Give your answer in terms of π

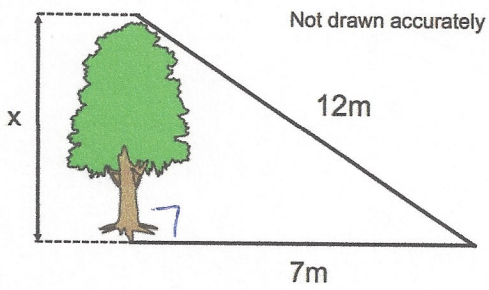
$((\pi \times 10) \div 4) + 5 + 5$

$2.5\pi + 10$

The mass of an object is measured at 450g to the nearest gram.

Complete the following statement to show the range of possible values of m.

449.5 ≤ m < 450.5



Work out the height of the tree

$x^2 + 7^2 = 12^2$

$x^2 + 49 = 144$

$x^2 = 95$

$x = 9.7468$ m