

2nd August

Corbettmaths

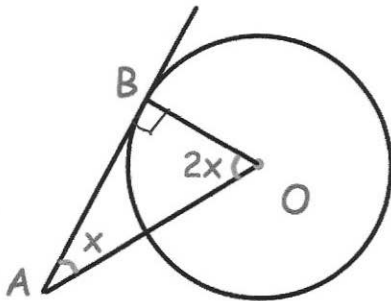
The width of a rectangle is 50cm, correct to 2 significant figures.
The length of a rectangle is 115cm, correct to 3 significant figures.

Calculate the lower bound for the area of the rectangle.

$$49.5 \times 114.5 \\ = 5667.75 \text{ cm}$$

What percentage of a distribution lies between the lowest value and the upper quartile?

75%



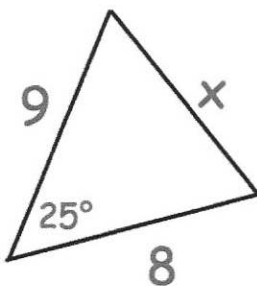
Find x

$$90 + x + 2x = 180 \\ 3x = 90 \\ x = 30$$

The population of a country increases by $x\%$ each year.
At the beginning of 2014 the population of the country was 24,000,000
At the beginning of 2017 the population was 26,996,736

Find the value of x

$$24000000 \times y^3 = 26996736 \\ y^3 = 1.124864 \\ y = 1.04 \\ x = 4\%$$



Find the length of the side labelled x.

$$x^2 = 9^2 + 8^2 - 2 \times 9 \times 8 \times \cos 25 \\ x^2 = 14.49... \\ x = 3.807 \text{ cm}$$