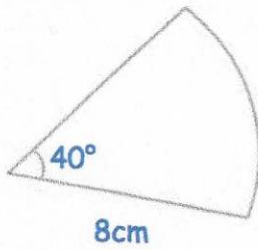


6th February



Corbettmaths

Find the area of the sector.



$$\frac{40}{360} \times \pi \times 8^2$$

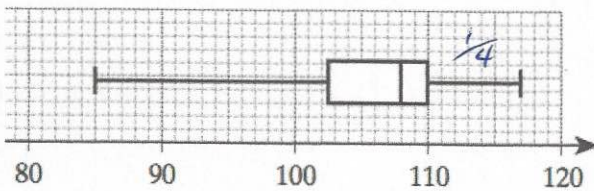
$$22.34 \text{ cm}^2$$

Write down the Sine Rule

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

Write down the Cosine Rule

$$a^2 = b^2 + c^2 - 2bc \cos A$$



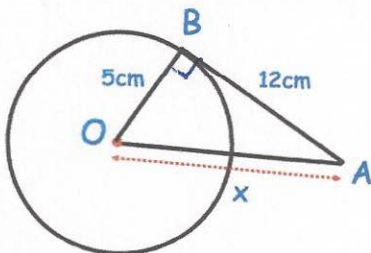
The IQs of some children are shown above.

Two are chosen at random.

What is the probability of both have an IQ over 110?

$$P(\text{over } 100 \text{ \& over } 100) = \frac{1}{4} \times \frac{1}{4}$$

$$= \frac{1}{16}$$



AB is a tangent.

Find x

$$a^2 + b^2 = c^2$$

$$5^2 + 12^2 = x^2$$

$$25 + 144 = x^2$$

$$x^2 = 169 \quad x = 13 \text{ cm}$$

Solve $2x^2 - 11x + 15 = 0$ using factorisation.

$$(2x - 5)(x - 3) = 0$$

$$x = 2.5 \text{ or } x = 3$$