



Write down the Sine Rule

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

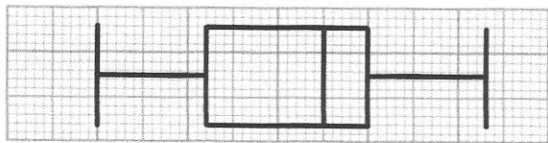
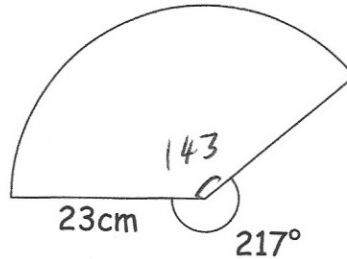
Write down the Cosine Rule

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

Find the area of the sector.

$$\frac{143}{360} \times \pi \times 23^2$$

$$660.1 \text{ cm}^2$$



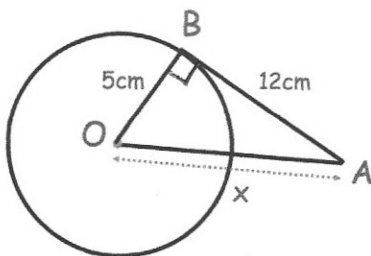
0 10 20 30 40 50 60
Time taken (minutes)

The box plot shows the time taken for a restaurant to deliver meals over a year.

The restaurant pick three customers at random.

Approximately what is probability that all their meals took longer than 40 minutes to arrive?

$$\frac{1}{4} \times \frac{1}{4} \times \frac{1}{4} = \frac{1}{64}$$



AB is a tangent.

Find x

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

$$x^2 = 169$$

$$x = 13 \text{ cm}$$

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

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

$$2x = 5$$

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