

1

In a **right-angled** triangle

smallest angle : largest angle = 2 : 5



Work out the three angles of the triangle.

[4 marks]

$$180^\circ - 90^\circ = 90^\circ$$

$$90^\circ \div 5 = 18^\circ \text{ (1)}$$

$$2 \times 18^\circ = 36^\circ \text{ (1)}$$

$$90^\circ - 36^\circ = 54^\circ$$

$$\text{(1)}$$

90

degrees

54

$$\text{(1)}$$

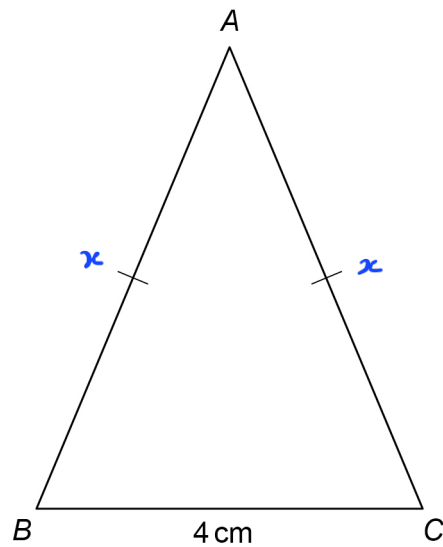
degrees

36

degrees

2 In this isosceles triangle,

$$AB = AC$$



Not drawn
accurately

The perimeter of the triangle is 22 cm

Work out the length of AB .

[3 marks]

$$2x + 4 = 22$$

$$2x = 18 \quad (1)$$

$$x = \frac{18}{2} \quad (1)$$

$$x = 9 \quad (1)$$

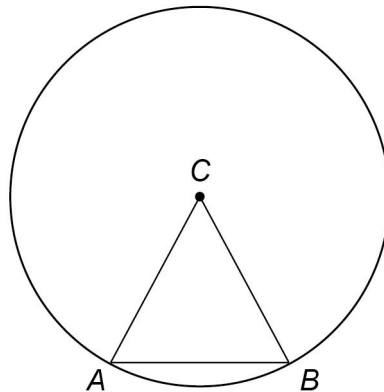
Answer 9 cm

3 For each statement, tick the correct box.

[3 marks]

	Always true	Sometimes true	Never true
One of the three angles of a triangle is 90°	<input type="checkbox"/>	<input checked="" type="checkbox"/> ❗	<input type="checkbox"/>
One of the three angles of a triangle is obtuse	<input type="checkbox"/>	<input checked="" type="checkbox"/> ❗	<input type="checkbox"/>
One of the three angles of a triangle is reflex	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> ❗

- 4 A and B are points on a circle.
 C is the centre of the circle.



Not drawn
accurately

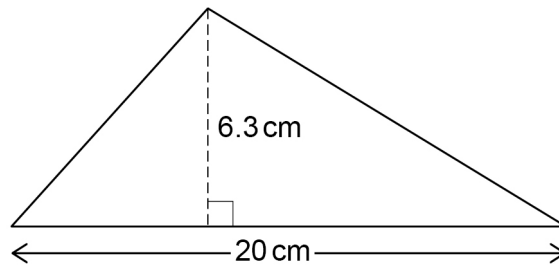
Tick **one** box for each statement.

[3 marks]

	Definitely true	Might be true	Cannot be true
Line AB is a tangent to the circle	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1
AC is an arc of the circle	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1
Triangle ABC is equilateral	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>

5

Not drawn accurately



Work out the area of this triangle.

Area of triangle = $\frac{1}{2} \times \text{base} \times \text{height}$

[2 marks]

$$\frac{1}{2} \times 20 \times 6.3$$

$$= 10 \times 6.3$$

$$= 63 \text{ cm}^2$$

Answer 63 cm²