Name:

Exam Style Questions

Area of a Segment

Corbettmaths

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

Guidance

1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

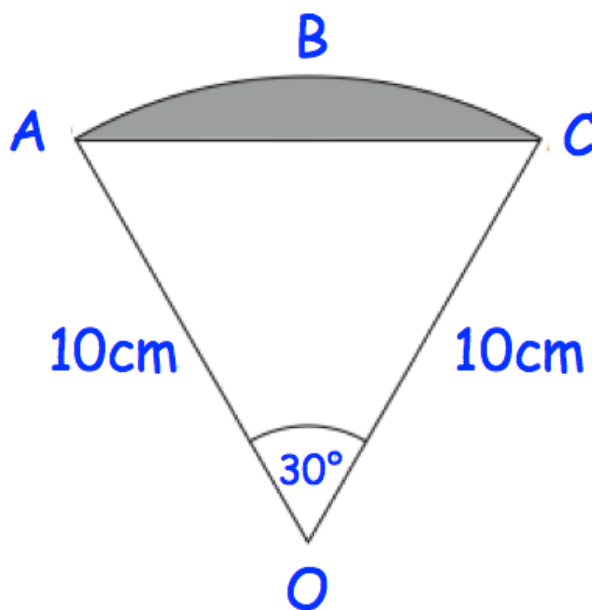Revision for this topic

Secondary

Video 63

1. The diagram shows a sector of a circle with centre O.
   The radius of the circle is 10cm.

   ABC is an arc of the circle.
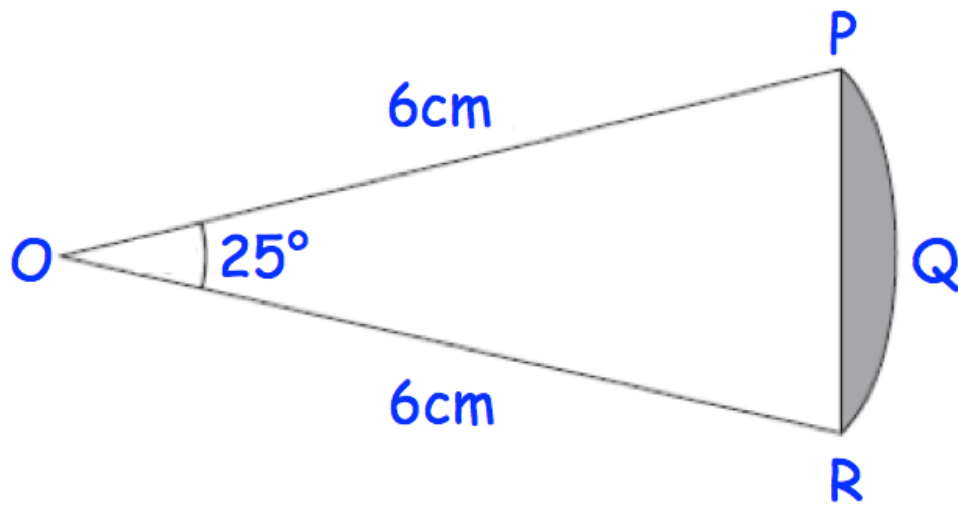   AC is a chord of the circle.
   Angle AOC = 30°

   Calculate the area of the shaded segment.
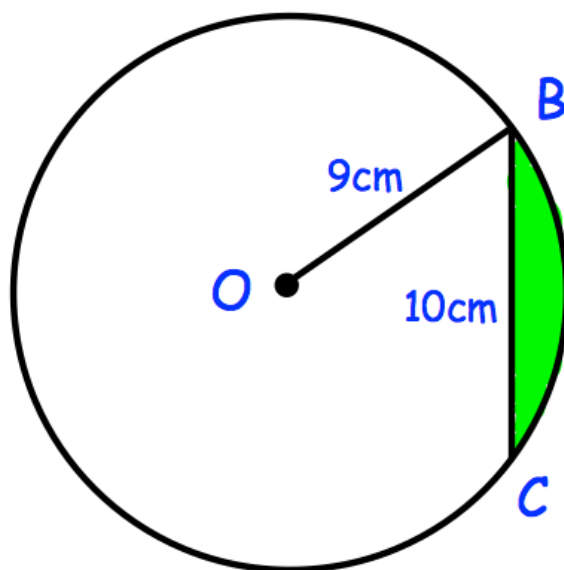
   ....cm²

   (5)

2.

PQR is an arc of a circle centre O with radius 6cm.
PR is a chord of the circle.
Angle POR = 25°.

Calculate the area of the shaded region.
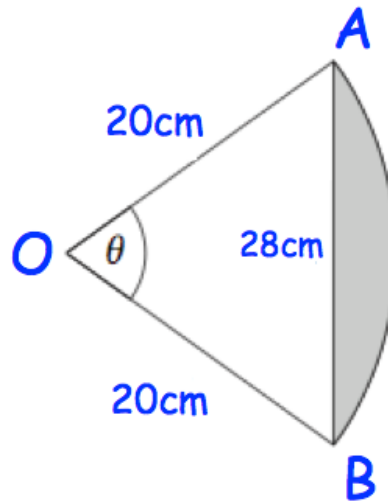Give your answer to 4 significant figures.

.........................cm²

(5)

3. BC is a chord of a circle, centre O, radius 9cm.
    BC = 10cm.

Calculate the area of the shaded segment.

..........................cm²

(6)

4. The diagram shows a triangle OAB and the arc AB of a circle whose centre is O and whose radius is 20cm.

A

20cm

O θ   28cm

20cm

B

(a) Find the size of the angle θ.

.........................°
(3)

(b) Find the length of the chord AB.

.........................cm
(3)

(c) Find the area of the shaded segment to the nearest cm².

.........................cm²
(3)