

Name: _____

Exam Style Questions

Arc Length



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

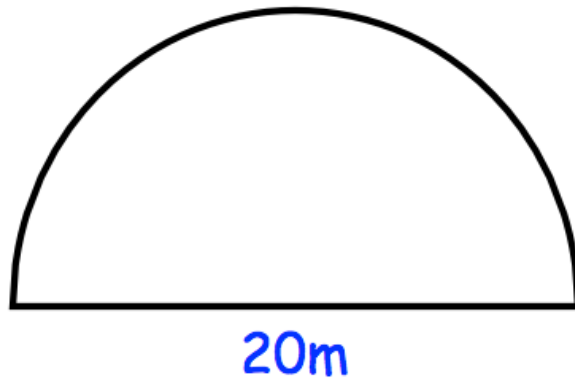
Revision for this topic

www.corbettmaths.com/contents

Video 58



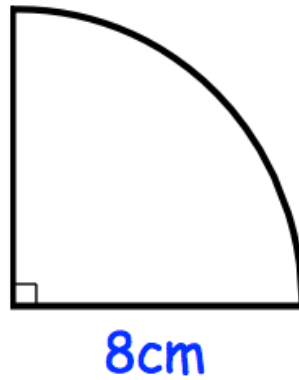
1. A semi-circle has diameter 20cm.



Taking $\pi = 3.14$, calculate the perimeter of the semi-circle.

.....m
(2)

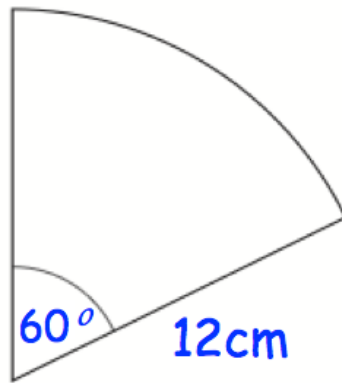
2.



Calculate the perimeter of the sector.

.....cm
(2)

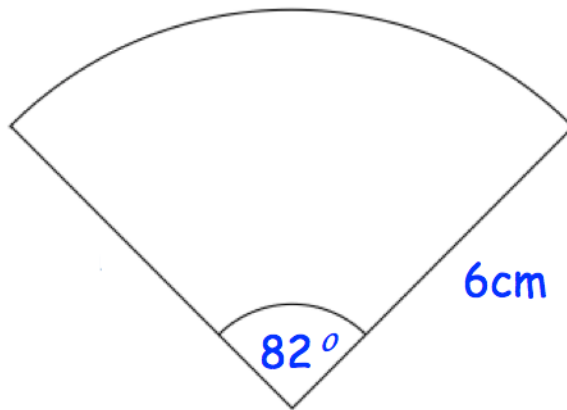
3. Shown is a sector of a circle.



Calculate the length of the arc.

.....cm
(3)

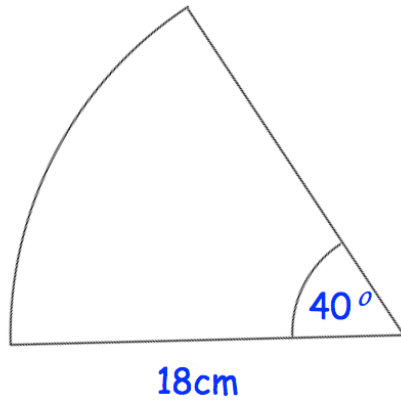
4.



Calculate the perimeter of the sector.
Give your answer to 2 decimal places.

.....cm
(3)

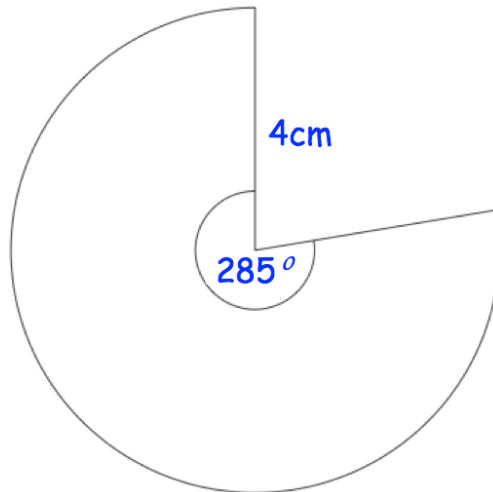
5.



Find the length of the arc, giving your answer in terms of π .

.....cm
(3)

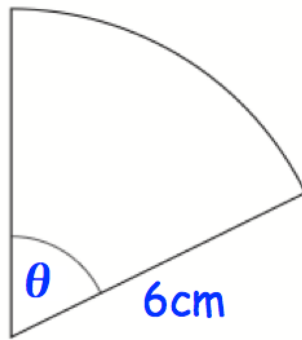
6.



Calculate the perimeter of the sector.

.....cm
(3)

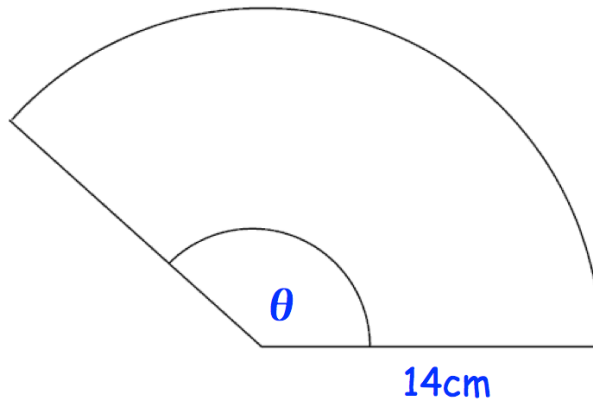
7. Shown is a sector.



The arc length is 4.4cm.
Calculate the size of the angle.

.....°
(3)

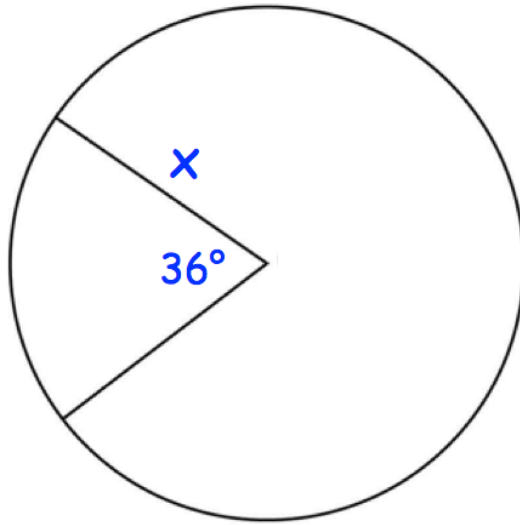
8.



The perimeter of the sector is 57.32cm.
Calculate the size of the angle.

.....°
(3)

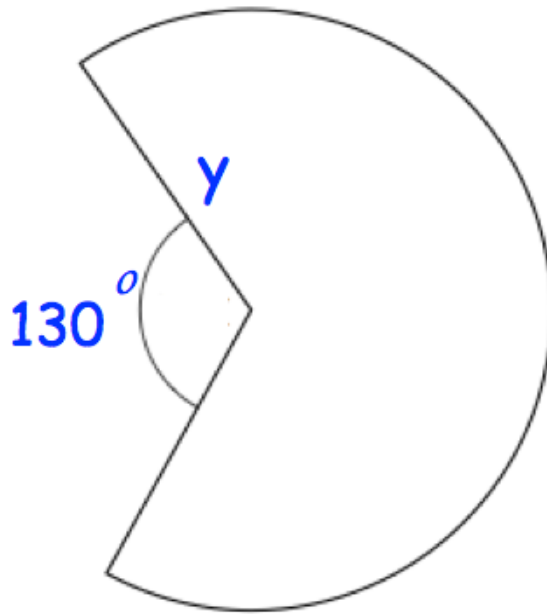
9.



The major arc length is 31.1cm.
Find the length of x , the radius of the circle.

.....cm
(3)

10.



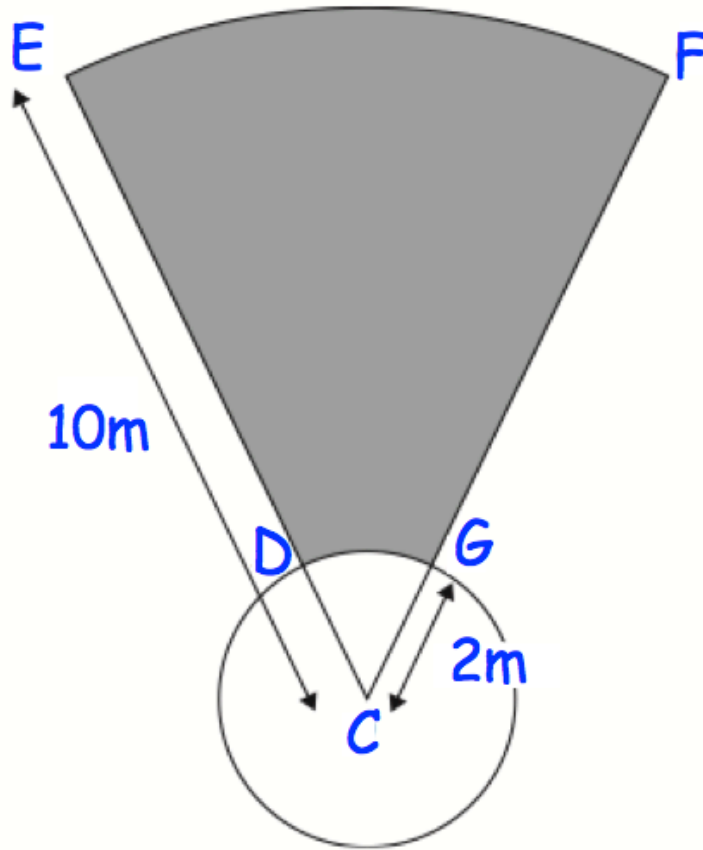
The perimeter of the sector is 1m.
Find the length of y , the radius of the circle.

.....cm
(4)

11. The shot putt throwing area, on a school's sport field, is formed from the sectors of two circles with centre C.



Angle ECF is 40°



Calculate the perimeter of the shaded region DEFG.

.....m
(4)