

WEEK: 20

Week Beginning: (03/08/20)

Subject: MATHS

Year: 6

Lesson Objective:

- Begin to work out area and perimeter of complex circles
- Be able to develop construct circles and details on the circle to enhance understanding of worded question

Class Worksheets

- Area questions
- Perimeter questions

Homework

- Continue to work on these two topics

Additional Notes

- All lesson worksheets and **homework for next week (due Week 21)** worksheets can be found below
- Week 19 homework will be marked in lesson hence make sure it is fully complete

Please print 2 a page or open this document during the lesson to save paper!

10. Here is a tile in the shape of a semicircle.

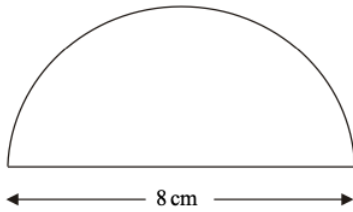


Diagram **NOT**
accurately drawn

The diameter of the semicircle is 8 cm.

Work out the perimeter of the tile.
Give your answer correct to 2 decimal places.

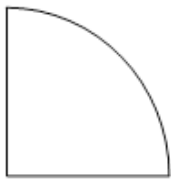
..... cm

(3 marks)

- 7) Find the radius of a circle which has an area of 34 cm^2 [1]

- 8) Find the diameter of a circle which has an area of 26 cm^2 [1]

Find the area of the quarter-circle of a circle with a diameter of 20 in. Use 3.14 for π and round the answer to the nearest hundredth.



11) Find the radius of a circle, where the circumference is: [1]

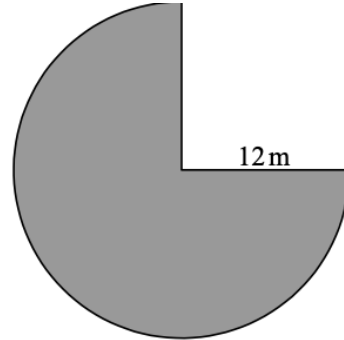
29 cm

12) Find the diameter of a circle, where the circumference is: [1]

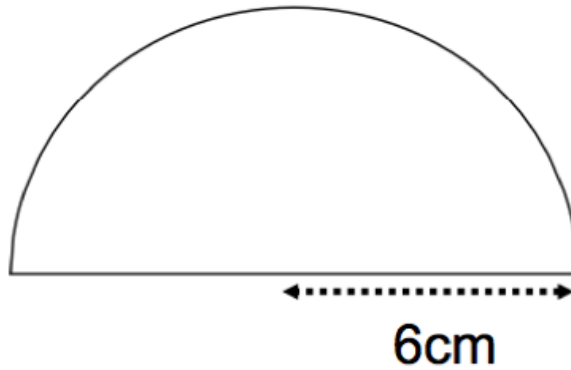
41 cm

11 The diagram shows three quarters of a circle with a radius of 12 metres.

Find the perimeter of the shape.



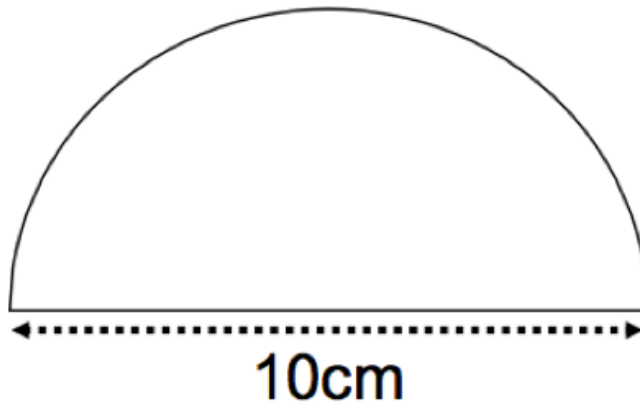
1. Shown is a semi-circle.



Work out the area.
State the units for your answer.

.....
(3)

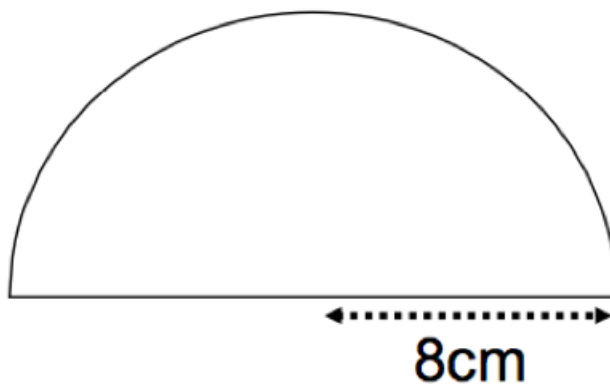
2. Shown is a semi-circle.



Work out the area.
State the units for your answer.

.....
(3)

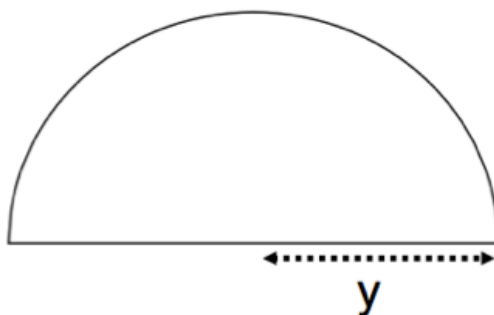
3. Below is a semi-circle.



Work out the area of the semi-circle.
Leave your answer in terms of π

.....cm²
(3)

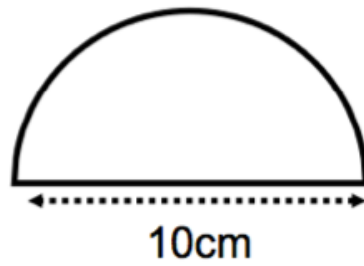
4. The semi-circle below has an area of 40cm²



Calculate y.

.....cm
(3)

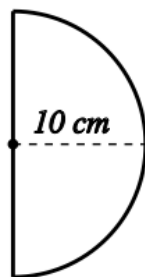
10.



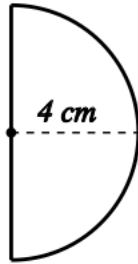
The semi-circle and square have the same area.

Calculate the side length of the square.

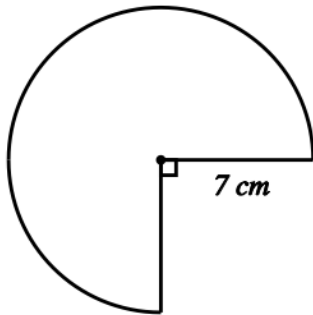
7) Find the perimeter of the semicircle, rounding your answer to 3 significant figures



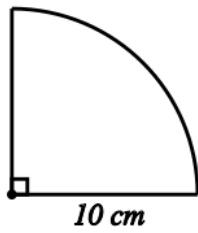
8) Find the perimeter of the semicircle, rounding your answer to 3 significant figures



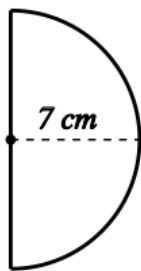
9) Find the perimeter of the three-quarter circle, rounding your answer to 3 significant figures



5) Find the arc length of the shape below, rounding your answer to 3 significant figures



4) Find the arc length of the semicircle, rounding your answer to 3 significant figures

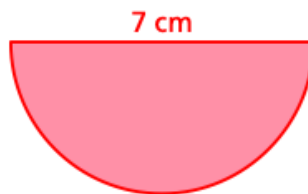


Find the perimeter of the semicircular region.

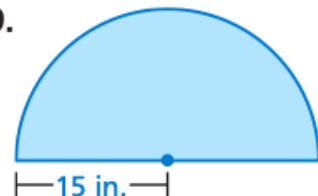
7.



8.



9.



HW: Complete any remaining questions