The City School

North Nazimabad Boys Campus

E-Worksheet

Teacher Name: Naushad Saqib Class: 8 Subject: Mathematics

Topic: Area and Perimeter

The circle

The circumference of any circle is given by the formula:

Circumference = $\pi \times$ diameter or $C = \pi D$

As the diameter is twice the radius, the circumference of a circle can also be g

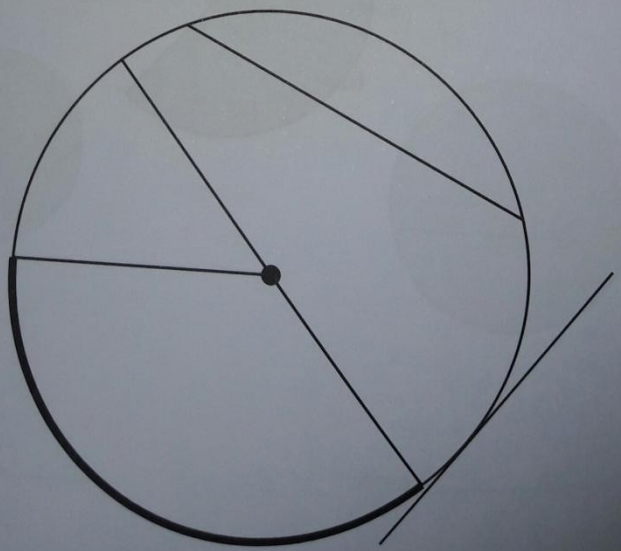
Circumference = $\pi \times 2 \times$ radius or $C = 2\pi r$

The area of a circle can be calculated using the formula:

Area of a circle = πr^2

Exercise 18.5

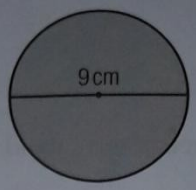
1 Label as many of the different parts of this circle as you can.



93

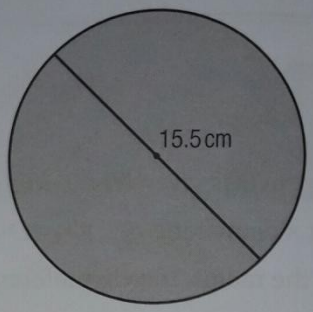
2 Calculate the circumference of each of these circles.
Give your answers correct to two decimal places.

a)



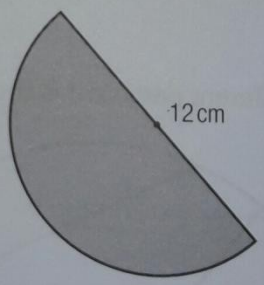
Circumference = _____

b)



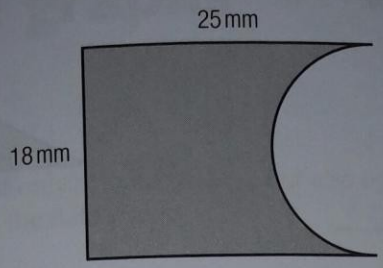
Circumference = _____

3 Calculate the perimeter of this semicircle.
Give your answer correct to one decimal place.



Perimeter = _____

4 Calculate the perimeter of this shape. Show your working clearly.



Perimeter = _____

5 A bicycle wheel has a diameter of 62 cm.

a) Calculate the length of its circumference, correct to one decimal place.

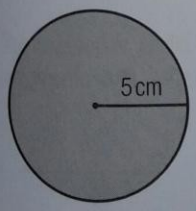
_____

b) How many times will the wheel rotate if a girl rides the bicycle for 3 km?
Give your answer correct to the nearest whole number.

_____

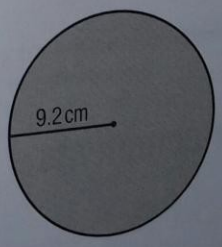
6 Calculate the area of each of these circles.
Give your answers correct to one decimal place.

a)



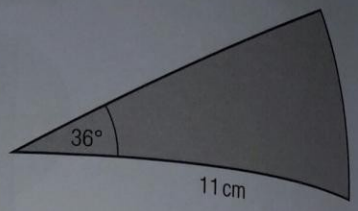
Area = _____

b)



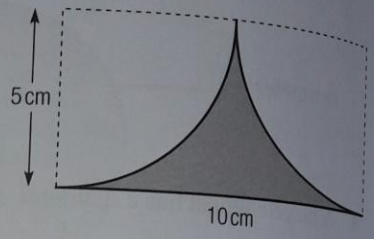
Area = _____

7 Calculate the area of this shape.
Show your working clearly.



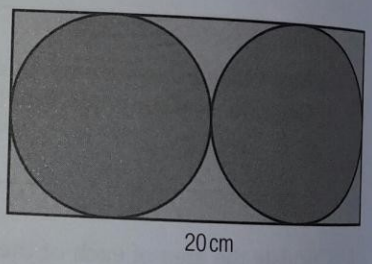
Area = _____

8 Calculate the area of the shaded region.
Show your working clearly.



Area = _____

9 This diagram shows two circular discs inside a rectangular frame. The discs just fit inside the frame. Calculate the area of the rectangle not covered by the discs.



Area = _____

Teacher comments