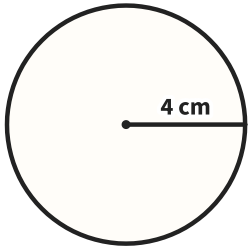
Circumference and Area of a Circle

1

Work out (a) the circumference and (b) the area. Give your answers to 1 decimal place.



r = 4 cm d = 8 cm

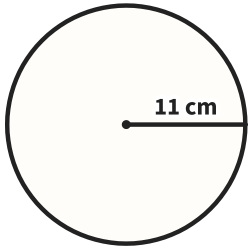
C = π × d = π × 8

A = π × r^2 = π × 4^2

(a) _____ cm **(b)** _____ cm²

2

Work out (a) the circumference and (b) the area. Give your answers to 1 decimal place.



r = 11 cm d = 22 cm

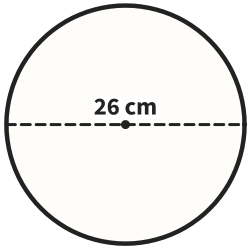
C = π × d = _____

A = π × r^2 = _____

(a) _____ cm **(b)** _____ cm²

3

Work out (a) the circumference and (b) the area. Give your answers to 1 decimal place.



r = _____ d = _____

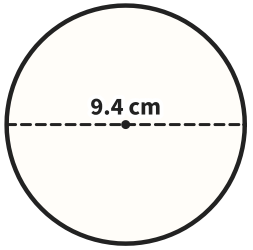
C = π × d = _____

A = π × r^2 = _____

(a) _____ cm **(b)** _____ cm²

4

Work out (a) the circumference and (b) the area. Give your answers to 1 decimal place.



r = _____ d = _____

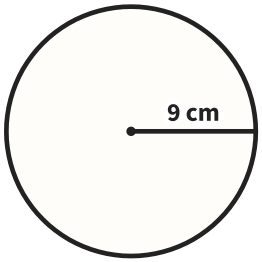
C = π × d = _____

A = π × r^2 = _____

(a) _____ cm **(b)** _____ cm²

5

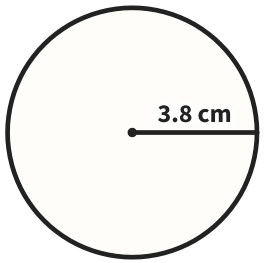
Work out (a) the circumference and (b) the area. Give your answers in terms of π.



(a) _____ cm **(b)** _____ cm²

6

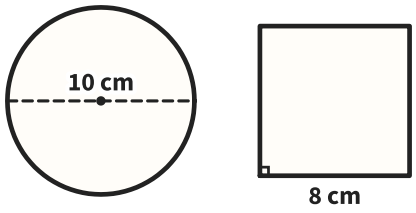
Work out (a) the circumference and (b) the area. Give your answers to 2 decimal places.



(a) _____ cm **(b)** _____ cm²

7

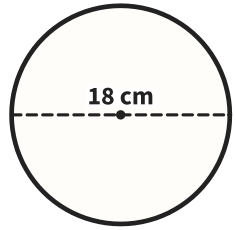
Which is longer: the circumference of the circle, or the perimeter of the square? Show how you know.



Answer _____

8

A circle has a diameter of 18 cm. Tomasz works out its area as π × 18^2 = 1017.9 cm². Explain his mistake, then work out the area. Give your answer to 1 decimal place.

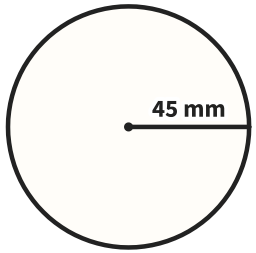


Answer _____

Circumference and Area of a Circle *further practice*

9

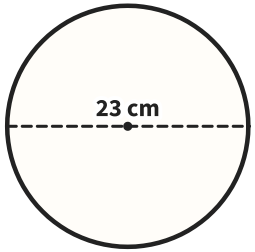
Work out the area of this circle.
Give your answer to 1 decimal place.



Answer _____

10

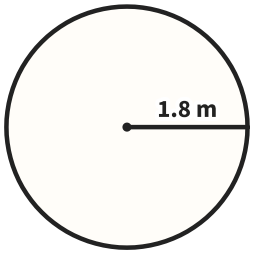
A round cake tin has a diameter of 23 cm.
A ribbon goes once round the outside of the tin. How long is the ribbon?
Give your answer to 1 decimal place.



Answer _____

11

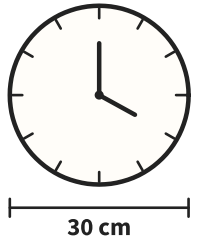
A round trampoline mat has a radius of 1.8 m. Work out the area of the mat.
Give your answer to 2 decimal places.



Answer _____

12

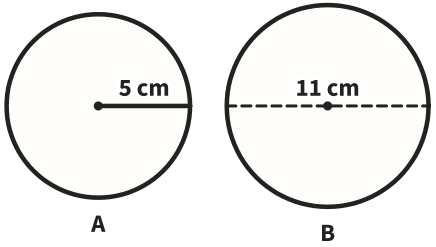
A round clock face measures 30 cm across, through its centre. Work out (a) the distance round its edge and (b) its area.
Give your answers to 1 decimal place.



(a) _____ cm **(b)** _____ cm^2

13

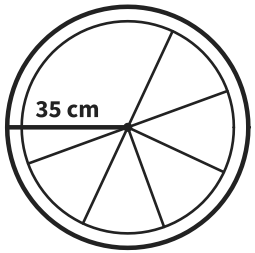
Which circle has the bigger area, A or B? By how much? Give your answer to 1 decimal place.



Answer _____

14

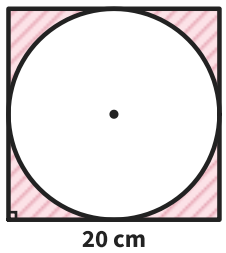
A bike wheel has a radius of 35 cm.
How far does the bike move, in metres, when the wheel turns 10 times?
Give your answer to 1 decimal place.



Answer _____

15

The biggest possible circle is cut from a square of side 20 cm. Work out the area of the shaded part that is left.
Give your answer to 1 decimal place.



Answer _____

16

Is Priya right? Use circles with diameters of 5 cm and 10 cm to explain.

> **Priya**
> If I double the diameter of a circle, its circumference doubles too.

Answer _____