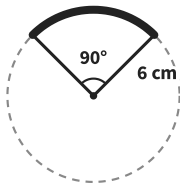


Arc Length



1 arc = fraction $\times$ circumference

Find the arc length to 1 decimal place.

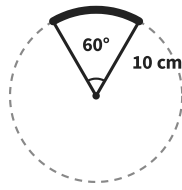


$$\text{Arc} = \frac{90}{360} \times \pi \times 12$$

fraction of the circle circumference

Answer _____ cm

2 Find the arc length to 1 decimal place.

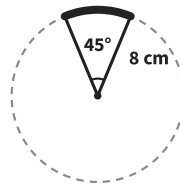


$$\text{Arc} = \frac{60}{360} \times \pi \times \quad$$

fraction of the circle circumference

Answer _____ cm

3 Find the arc length to 1 decimal place.

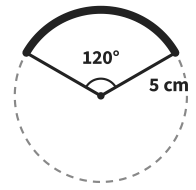


$$\text{Arc} = \frac{45}{360} \times \pi \times \quad$$

fraction of the circle circumference

Answer _____ cm

4 Find the arc length to 1 decimal place.



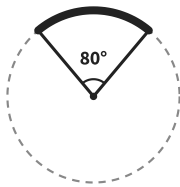
$$\text{Arc} = \frac{120}{360} \times \pi \times \quad$$

fraction of the circle circumference

Answer _____ cm

5 *Notice the change!*

The circle has diameter 14 cm.
Find the arc length to 1 decimal place.

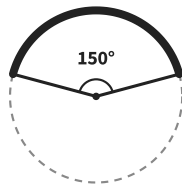


$$\text{Arc} = \frac{\quad}{360} \times \pi \times \quad$$

fraction of the circle circumference

Answer _____ cm

6 The circle has diameter 9 cm.
Find the arc length to 1 decimal place.



$$\text{Arc} = \frac{\quad}{360} \times \pi \times \quad$$

fraction of the circle circumference

Answer _____ cm

7 A pizza has a diameter of 30 cm.
It is cut into 8 equal slices.
Find the length of the crust on one slice to 1 decimal place.

Answer _____

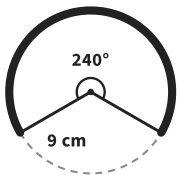
8 An arc of a circle of radius 6 cm has a length of 2π cm. Find the angle of the sector.

Answer _____

Arc Length *further practice*

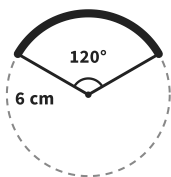


9 Find the arc length to 1 decimal place.



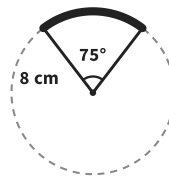
Answer _____

10 Find the arc length. Give your answer in terms of π .



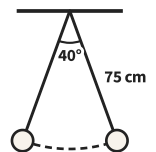
Answer _____

11 Find the perimeter of the sector to 1 decimal place.



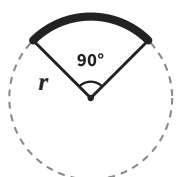
Perimeter _____

12 A pendulum is 75 cm long.
Its end swings from one side to the other through an angle of 40° .
How far does the end travel?
Give your answer to 1 decimal place.



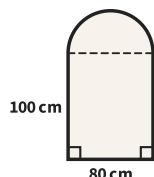
Answer _____

13 The arc is 5π cm long.
Find the radius, r .



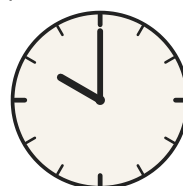
$r =$ _____

14 A window is a rectangle with a semicircle on top. Find the perimeter of the window to 1 decimal place.



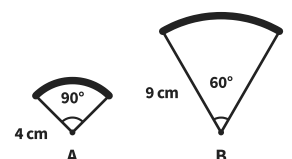
Perimeter _____

15 The minute hand of a clock is 9 cm long. How far does its tip travel in 20 minutes? Give your answer to 1 decimal place.



Answer _____

16 Mia says sector A must have the longer arc because its angle is bigger. Is Mia right? Explain.



Answer _____