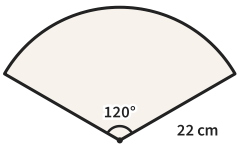
Interleaved: arc length and sector area

1

A paper fan opens into this sector.
Ribbon is sewn along its curved edge only.
How long is the ribbon? Give your answer to 1 decimal place.



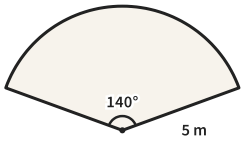
Which method? Arc length | Sector area | Perimeter of a sector

$120/360 \times 2 \times \pi \times 22$

Answer 46.1 cm

2

A garden sprinkler waters this sector of lawn. What area of lawn does it water?
Give your answer to 1 decimal place.

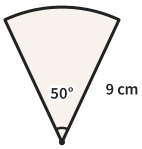


Which method? Arc length | Sector area | Perimeter of a sector

Answer

3

Find the perimeter of this sector.
Give your answer to 1 decimal place.

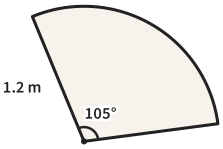


Which method? Arc length | Sector area | Perimeter of a sector

Answer

4

A garden gate 1.2 m wide swings open through 105°. How far does the latch at its end travel? Give your answer to 1 decimal place.

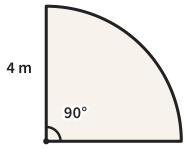


Which method? Arc length | Sector area | Perimeter of a sector

Answer

5

A flower bed is a quarter circle.
Edging goes all the way round it.
How much edging is needed?
Give your answer in terms of π.

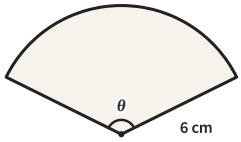


Which method? Arc length | Sector area | Perimeter of a sector

Answer

6

The area of this sector is 40 cm².
Find the angle θ. Give your answer to 1 decimal place.

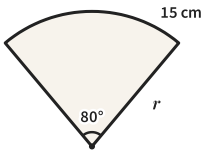


Which method? Arc length | Sector area | Perimeter of a sector

Answer

7

The arc of this sector is 15 cm long.
Find the radius r. Give your answer to 1 decimal place.

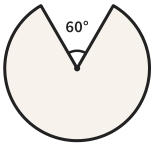


Which method? Arc length | Sector area | Perimeter of a sector

Answer

8

A badge is a circle of radius 2.5 cm with a 60° sector cut out. Find the area of the badge.
Give your answer to 1 decimal place.



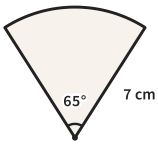
Which method? Arc length | Sector area | Perimeter of a sector

Answer

Interleaved: arc length and sector area *further practice*

9

Find the arc length of this sector.
Give your answer to 1 decimal place.



Answer

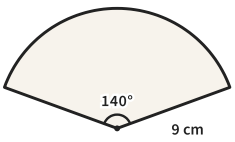
10

A shop sign is a sector of a circle with a radius of 60 cm and an angle of 100°.
A strip of lights goes all the way round its edge. How long is the strip?
Give your answer to 1 decimal place.

Answer

11

Find the area of this sector.
Give your answer in terms of π.



Answer

12

A railway line bends round an arc of a circle with a radius of 450 m. The line turns through 35°. How long is the curved part of the track? Give your answer to 1 decimal place.

Answer

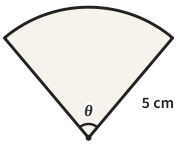
13

A sector has an angle of 72° and an area of 45 cm². Find its radius. Give your answer to 1 decimal place.

Answer

14

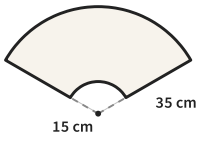
The perimeter of this sector is 17 cm.
Find the angle θ. Give your answer to 1 decimal place.



Answer

15

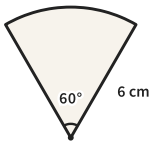
A windscreen wiper turns through 120°.
Its blade cleans the glass from 15 cm to 50 cm away from the pivot. What area of glass does it clean? Give your answer to 1 decimal place.



Answer

16

Tom says the perimeter of this sector is 6.3 cm. Explain his mistake and find the correct perimeter. Give your answer to 1 decimal place.



Answer