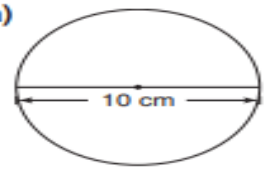
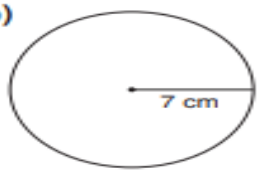
WS 136

1. Calculate the circumference of each circle.
Give the answers to two decimal places.
Estimate to check the answers are reasonable.

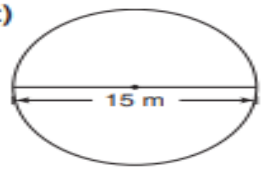
a)



b)

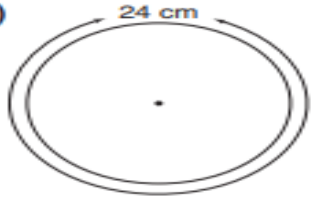


c)

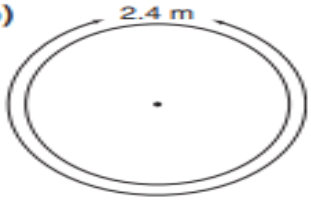


2. Calculate the diameter and radius of each circle.
Give the answers to two decimal places.
Estimate to check the answers are reasonable.

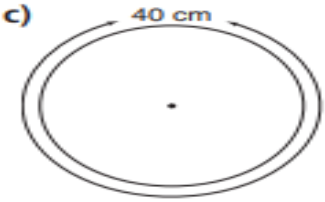
a)



b)



c)



4. A circular garden has diameter 2.4 m.

a) The garden is to be enclosed with plastic edging.
How much edging is needed?

b) The edging costs $4.53/m.
What is the cost to edge the garden?

5. **a)** Suppose you double the diameter of a circle.
What happens to the circumference?

b) Suppose you triple the diameter of a circle.
What happens to the circumference?

Show your work.

6. A carpenter is making a circular tabletop with circumference 4.5 m.
What is the radius of the tabletop in centimetres?

Recall: 1 m = 100 cm

8. **Assessment Focus** A bicycle tire has a spot of wet paint on it.
The radius of the tire is 46 cm.
Every time the wheel turns, the paint marks the ground.

a) What pattern will the paint make on the ground as the bicycle moves?

b) How far will the bicycle have travelled between two consecutive paint marks on the ground?

c) Assume the paint continues to mark the ground.
How many times will the paint mark the ground when the bicycle travels 1 km?
Show your work.