

Use  $\pi = 3.14$  in your calculations.

- 1** Work out the circumference of each of these circles.
- |                             |                            |
|-----------------------------|----------------------------|
| <b>(a)</b> diameter = 5 cm  | <b>(b)</b> diameter = 7 cm |
| <b>(c)</b> diameter = 1.5 m | <b>(d)</b> radius = 3 cm   |
| <b>(e)</b> radius = 15 mm   | <b>(f)</b> radius = 2.8 cm |

- 2** The large wheel on Maria's bicycle has a diameter of 50 cm.

- (a)** What is the circumference of this wheel?

Maria cycles 48 m to the end of her road.

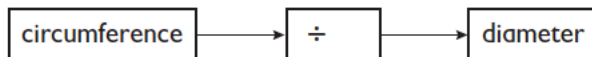
- (b)** How many times does the large wheel go round.

The small wheel has a radius of 20 cm.

- (c)** How many times does the small wheel go round as Maria cycles to the end of the road?



- 3** Copy and complete this number machine to show how to work out the diameter of a circle from its circumference.



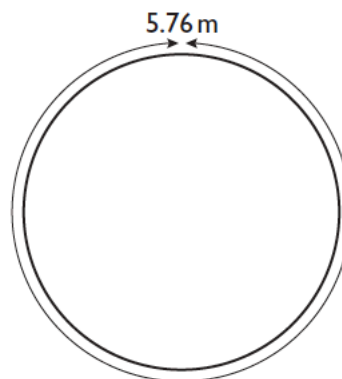
- 4** This is the formula to find the circumference of a circle from its diameter.

$$\text{Circumference} = \pi \times \text{Diameter}$$

Copy and complete this formula to show how to work out the diameter of a circle from its circumference.

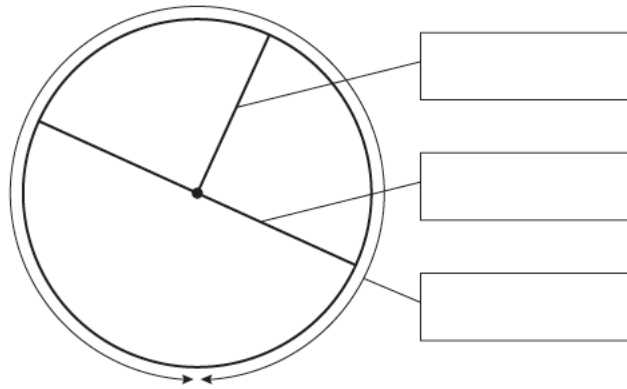
$$\text{Diameter} = \text{_____} \div \text{___} \text{ or } d = \text{_____}$$

- 5** Calculate
- (a)** the diameter
- (b)** the radius
- of this circle.

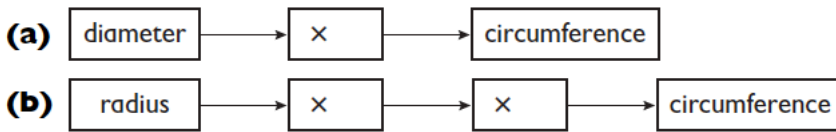


- 1** Copy this diagram.  
Use these words to label it.

circumference  
radius  
diameter



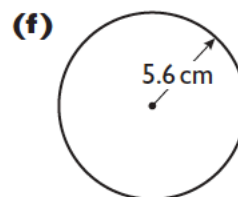
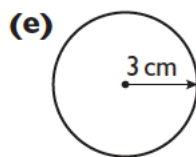
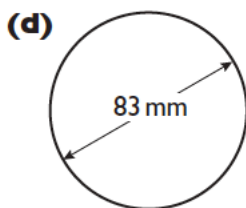
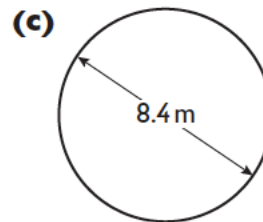
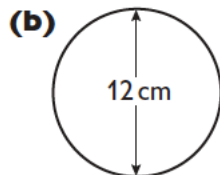
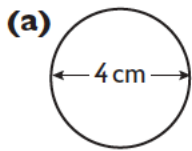
- 2** Copy and complete these number machines to show how to work out the circumference of a circle.



- 3** Copy and complete these formulae to show how to work out the circumference of a circle.

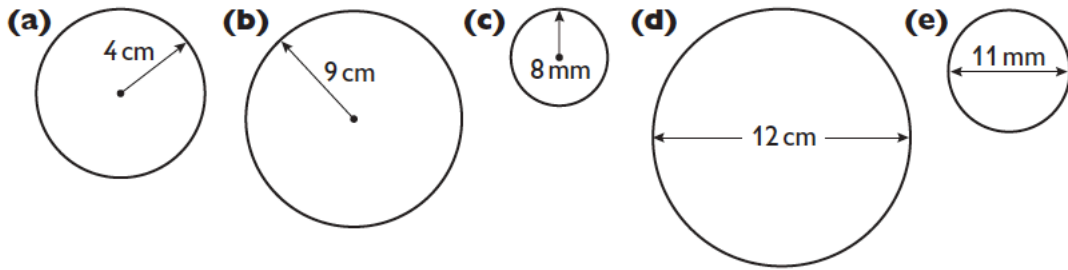
- (a) Circumference =  ×  or  $C =$
- (b) Circumference =  ×  ×  or  $C =$

- 4** Use  $\pi = 3.14$  to work out the circumference of each of these circles.



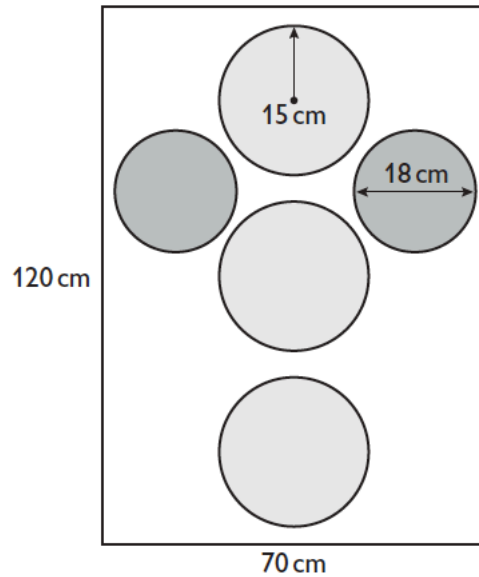
Use  $\pi = 3.14$  in your calculations.

**1** Work out the area of each of these circles.

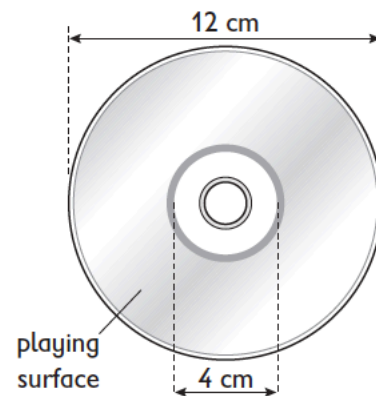


**2** This stained-glass window is made from three large red circles and two small blue circles. The surrounding glass is clear.

- (a) Calculate the area of one of the red circles.
- (b) Calculate the area of one of the blue circles.
- (c) Calculate the area of the clear glass.



**3** Calculate the area of the playing surface of this compact disc.



**4** Calculate the area of this company logo.

