

# Summer Term Maths Year 10

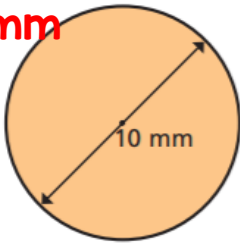
## Circumference of a circle

Day  
**1**

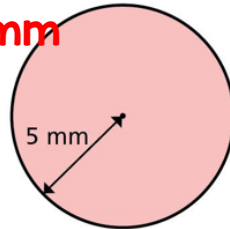
Week 4

**1** Find the circumference of these circles giving your answer in terms of  $\pi$ .

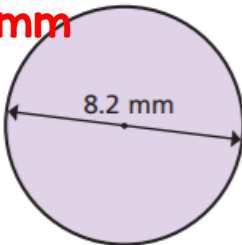
(a)  $10\pi$  mm



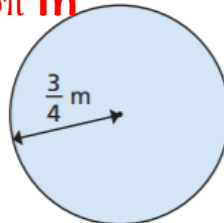
(c)  $10\pi$  mm



(b)  $8.2\pi$  mm



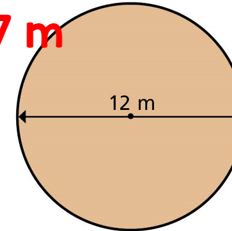
(d)  $1.5\pi$  m



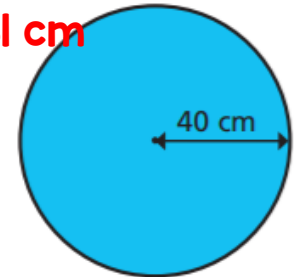
**2** Explain why two of the circles in question one have the same value for their circumference. **Circles a and c have the same diameter of 10 mm**

**3** Use a calculator to find the circumference of these circles giving your answers to 3 significant figures.

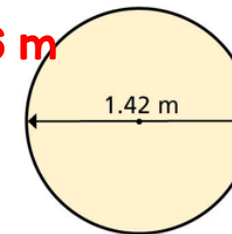
(a) 37.7 m



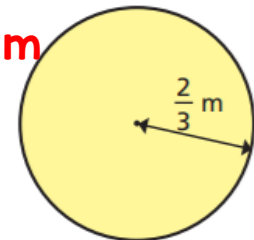
(c) 251 cm



(b) 4.46 m



(d) 4.19 m



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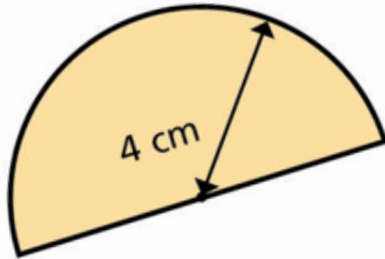
## Circumference of a circle

Day 1

Week 4

- 4 Find the perimeter of the semi-circle giving your answer in terms of  $\pi$ .

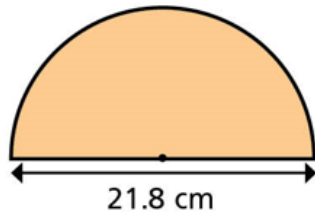
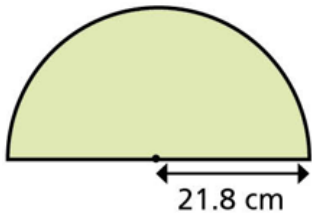
$$4\pi + 4$$



- 5 Find the perimeter of the semi-circles, give your answer to 2 decimal places.

$$112.08 \text{ cm}$$

$$56.04 \text{ cm}$$



What do you notice about your answers?

- 6 The circumference of a circle is 90 cm.

- (a) Find the diameter of the circle. **28.6 cm**  
(b) Find the radius of the circle **14.3 cm**

- 7 A wheel with a diameter of 30 cm is rolled 50 m. How many complete revolutions does the wheel make? **53**

- 8 The diagram below shows part of a children's toy. It has been made from a single piece of wire. What is the total length of wire? **22.1 cm**

