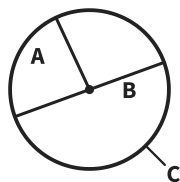


1 Parts of a circle

- a) Write a word from the box for each part A, B and C.
- b) A circle has a radius of 7 cm. What is its diameter?



radius diameter circumference chord

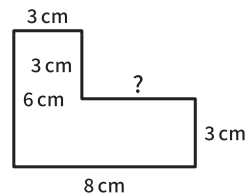
a) A radius, B diameter
C circumference

b) $7 \times 2 = 14 \text{ cm}$

2 Perimeter of compound shapes

All the corners are right angles.

- a) Work out the length marked ?
- b) Work out the perimeter of the shape.



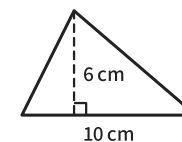
a) $8 - 3 = 5 \text{ cm}$

b) $3 + 3 + 5 + 3 + 8 + 6 = 28 \text{ cm}$

3 Area of 2D shapes

Area of a triangle = $\frac{1}{2} \times \text{base} \times \text{height}$

- a) Work out the area of the triangle.
- b) A parallelogram has a base of 7 cm and a height of 3 cm. Area = base $\times$ height. Work out its area.



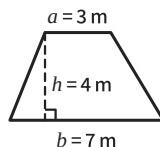
a) $\frac{1}{2} \times 10 \times 6 = 30 \text{ cm}^2$

b) $7 \times 3 = 21 \text{ cm}^2$

4 Area of 2D shapes

Area of a trapezium = $\frac{1}{2} \times (a + b) \times h$

- a) Work out the area of the trapezium.
- b) A rectangle has the same area. Its length is 5 m. Work out its width.



a) $\frac{1}{2} \times (3 + 7) \times 4 = 20 \text{ m}^2$

b) $20 \div 5 = 4 \text{ m}$

Perimeter and area of 2D shapes

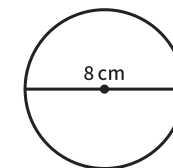
revision mat answers

Foundation B

5 Circumference and area of a circle

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

- a) Work out the circumference of this circle. Give your answer to 1 decimal place.
- b) A round table has a diameter of 1.5 m. Work out its circumference to 1 decimal place.



a) $\pi \times 8 = 25.1 \text{ cm}$

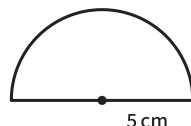
b) $\pi \times 1.5 = 4.7 \text{ m}$

6 Circumference and area of a circle

Area = $\pi \times \text{radius}^2$

This shape is half of a circle.

- a) Work out the area of the whole circle. Give your answer to 1 decimal place.
- b) Work out the area of the semicircle.



a) $\pi \times 5^2 = 78.5 \text{ cm}^2$

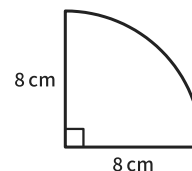
b) $78.5 \div 2 = 39.3 \text{ cm}^2$

7 Arc length

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

This sector is a quarter of a circle.

- a) Work out the circumference of the whole circle. Give your answer to 1 decimal place.
- b) Work out the arc length of the sector.

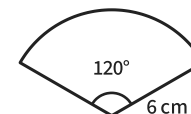


a) $\pi \times 16 = 50.3 \text{ cm}$

b) $50.3 \div 4 = 12.6 \text{ cm}$

8 Area of a sector

- a) There are 360° in a full turn. What fraction of a whole circle is this sector?
- b) The whole circle has an area of 113.1 cm^2 . Work out the area of the sector.



Not drawn accurately

a) $\frac{120}{360} = \frac{1}{3}$

b) $113.1 \div 3 = 37.7 \text{ cm}^2$