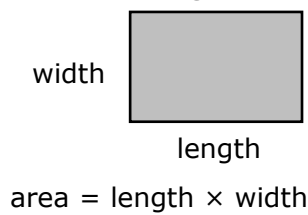


Perimeter – the distance around the outside of a shape. Measured in cm, mm, km ...

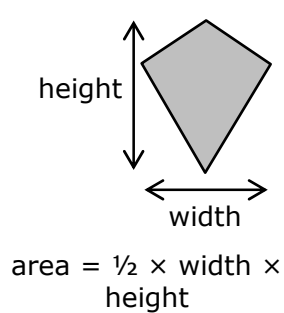
$$\pi \approx 3.14$$

Area – the space inside a 2D shape. Measured in 'square units', e.g. cm², mm², m² ...

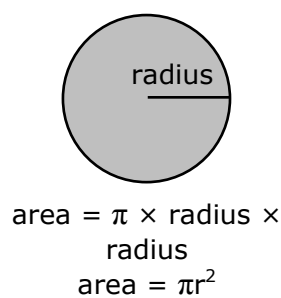
Rectangle



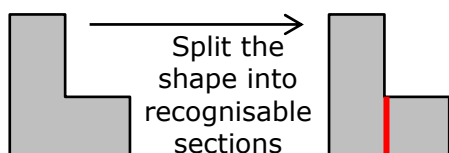
Kite



Circle

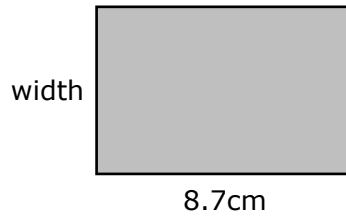


Compound shapes – a shape made up of two or more recognisable shapes.



Remember to give workings for your answers!

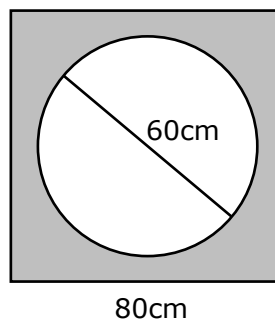
1. The length of a rectangle is 8.7cm. The perimeter of the rectangle is 25.2cm.



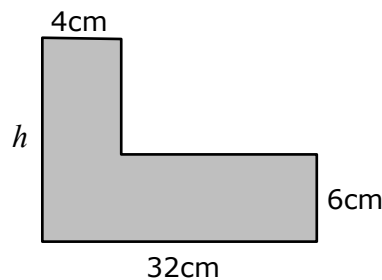
Calculate the width of the rectangle.

2. Work out the area of a circle (to the nearest cm²) which has a circumference of 66cm.

3. A circle of diameter 60cm is cut out of a square of side 80cm. Calculate the shaded area.



4. The perimeter of this shape is 112cm.

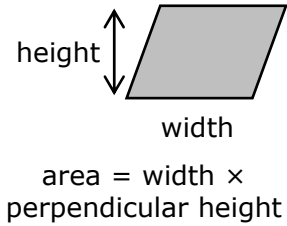


Find the length marked *h*.

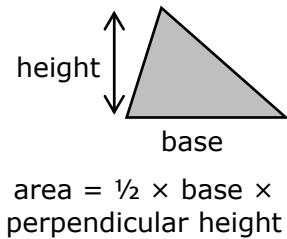
Diagrams are not drawn to scale.

$$\text{diameter} = 2 \times \text{radius}$$

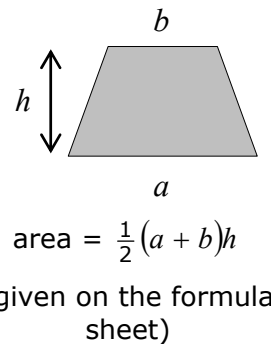
Parallelogram



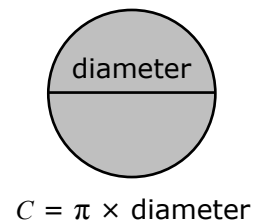
Triangle



Trapezium

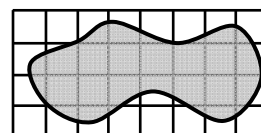


Circumference – the perimeter of a circle.



Unusual shapes

Estimate the area by placing onto a scale grid:



Teaching notes

This resource contains a selection of questions accompanied by revision notes. The notes are colour coded to give students an indication of the GCSE grade they are working towards, useful in self or peer assessment:

- blue: grades G – E
- green: grades D/C
- red: grades B – A*

You can choose whether to reveal the grades before or after students complete the questions.

Suggested uses

- Use as an individual revision sheet, homework, cover work, open book test, etc.
- Photocopy onto A3 and use as a poster during revision season.
- Laminate and tape to the desk for small group revision. You could create 'revision stations' with other Desktop revision resources on www.teachitmaths.co.uk (quick search: 'desktop').

Answers

1. width = $\frac{1}{2} (25.2 - 2 \times 8.7) = \mathbf{3.9cm}$

2. radius = $\frac{33}{\pi}$

$$\text{area} = \pi \times \left(\frac{33}{\pi}\right)^2 = \frac{1089}{\pi} = \mathbf{347cm^2}$$
 (to the nearest whole number)

3. area = $80^2 - 30^2 \times \pi = \mathbf{3572.6cm^2}$ (1 d.p.) OR $\mathbf{1574cm^2}$ (if taking π as 3.14)

4. Perimeter of 'L' shape is the same as the surrounding rectangle:

$$112 = 2 \times 32 + 2h$$

$$h = \mathbf{24cm}$$