

100% Area and Perimeter & Unit of Measurement Facts

Metric & Imperial Conversions


Approximate equivalence between metric and imperial units.

Lengths	5 miles \approx 8 kilometres 1 inch \approx 2.5 cm.
Volume	1 gallon \approx 4.5 litres. 1 Litre \approx 1.75 pints
Weight	1 kg \approx 2.2 pounds.

Length	Weight	Volume
1 km = 1,000 m	1 tonne = 1,000 kg	1 litre = 1,000 ml
1 m = 1,000 mm	1 kg = 1,000 g	1 litre = 100 cl
1 m = 100 cm	1 g = 1,000 mg	1 litre = 1,000 cm ³
1 cm = 10 mm	1 tonne = 1,000,000 g	1 cl = 10 ml

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

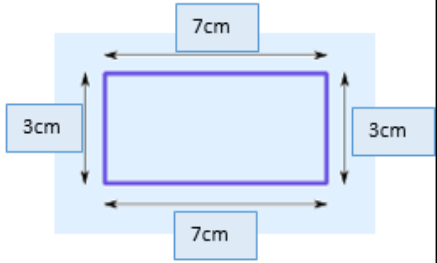
Rectangle



width length


area = length \times width

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



The perimeter of this rectangle is $7+3+7+3 = 20\text{cm}$


Parallelogram



height width

area = width \times perpendicular height

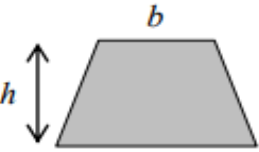
Triangle



height base

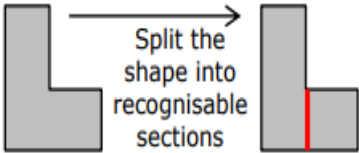
area = $\frac{1}{2} \times$ base \times perpendicular height

Trapezium



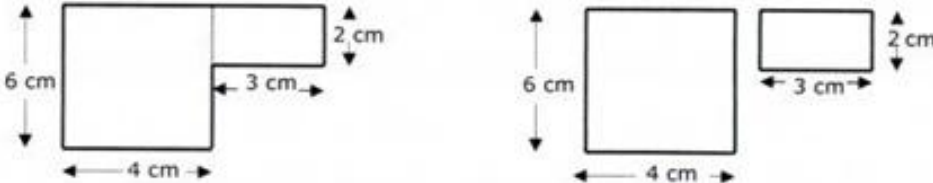
area = $\frac{1}{2}(a + b)h$

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



Split the shape into recognisable sections

The area of this shape $\xrightarrow{\text{EQUALS}}$ the area of these two



The area of this shape = $(6 \times 4) + (2 \times 3)$
 $= 24 + 6$
 $= 30 \text{ cm}^2$