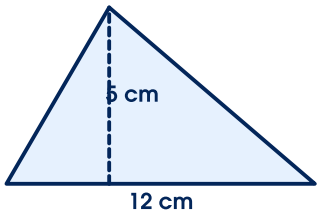
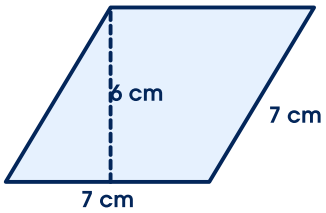
GCSE FOUNDATION · REVISION MAT 3

# Area of triangles and quadrilaterals

**1** Work out the area of this triangle.




**2** Work out the area of this parallelogram.

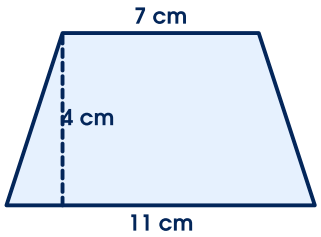



**3** A triangle has base 9 cm and perpendicular height 6 cm.

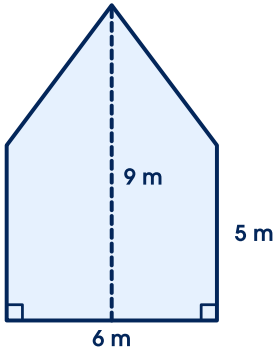
Ola says the area is 54 $cm^2$.

Explain the mistake Ola has made.

**4** Show that the area of this trapezium is 36 $cm^2$.




**5** The diagram shows the end wall of a shed.




One tin of paint covers 6 $m^2$.

How many tins are needed to paint the wall?

**6** A trapezium has an area of 45 $cm^2$.

Its parallel sides are 4 cm and 6 cm.

Work out the perpendicular height of the trapezium.

ANSWERS · REVISION MAT 3

# Area of triangles and quadrilaterals

**1** $\frac{1}{2} \times 12 \times 5 = \mathbf{30\ cm^2}$

**2** Area = base × perpendicular height

$7 \times 6 = \mathbf{42\ cm^2}$

**3** Ola forgot to halve: a triangle is half of a rectangle.

$\frac{1}{2} \times 9 \times 6 = \mathbf{27\ cm^2}$

**4** $\frac{1}{2} \times (7 + 11) \times 4$

$= \mathbf{36\ cm^2}$ ✓

**5** Rectangle $6 \times 5 = 30\ m^2$

Triangle $\frac{1}{2} \times 6 \times 4 = 12\ m^2$

Total $42\ m^2$

$42 \div 6 = 7.00$, so **7 tins**

**6** $\frac{1}{2} \times (4 + 6) \times h = 45$

$5h = 45$

$h = \mathbf{9\ cm}$

Mr&Mrs MATHS