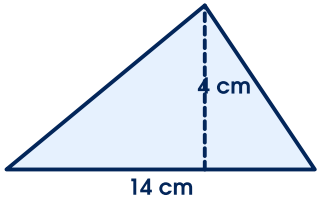
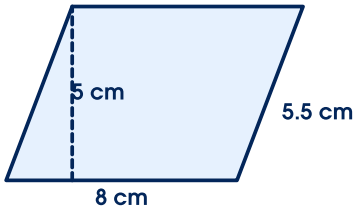
GCSE FOUNDATION · REVISION MAT 5

# Area of triangles and quadrilaterals

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




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

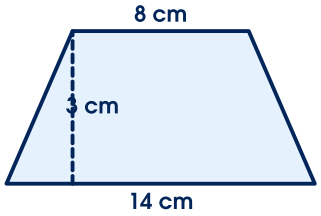



**3** A triangle has base 10 cm and perpendicular height 9 cm.

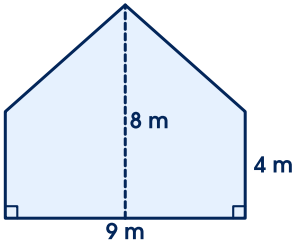
Quinn says the area is 90 $cm^2$.

Explain the mistake Quinn has made.

**4** Show that the area of this trapezium is 33 $cm^2$.




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




One tin of paint covers 7 $m^2$.

How many tins are needed to paint the wall?

**6** A trapezium has an area of 63 $cm^2$.

Its parallel sides are 6 cm and 12 cm.

Work out the perpendicular height of the trapezium.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 5

# Area of triangles and quadrilaterals

**1** $\frac{1}{2} \times 14 \times 4 = \mathbf{28\ cm^2}$

**2** Area = base × perpendicular height

$8 \times 5 = \mathbf{40\ cm^2}$

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

$\frac{1}{2} \times 10 \times 9 = \mathbf{45\ cm^2}$

**4** $\frac{1}{2} \times (8 + 14) \times 3$

$= \mathbf{33\ cm^2}$ ✓

**5** Rectangle $9 \times 4 = 36\ m^2$

Triangle $\frac{1}{2} \times 9 \times 4 = 18\ m^2$

Total $54\ m^2$

$54 \div 7 = 7.71$, so **8 tins**

**6** $\frac{1}{2} \times (6 + 12) \times h = 63$

$9h = 63$

$h = \mathbf{7\ cm}$