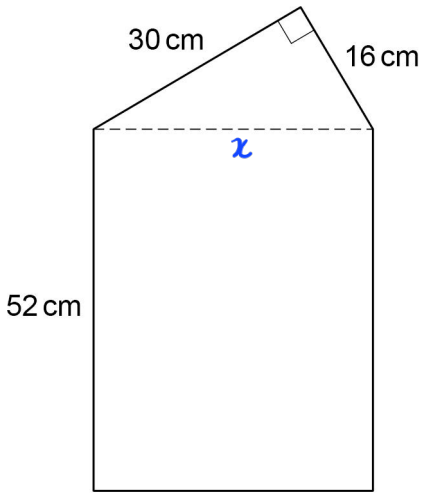
1 A shape is made by joining a right-angled triangle to a rectangle.



Not drawn accurately

Work out the area of the shape.

[5 marks]

$x^2 = 30^2 + 16^2$

$= 900 + 256$ (1)

$= 1156$

$x = \sqrt{1156} = 34$ (1)

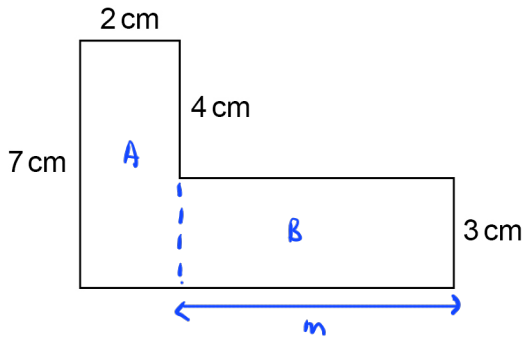
Area of triangle : $\frac{1}{2} \times 30 \times 16 = 240$ (1)

Area of rectangle : $52 \times 34 = 1768$ (1)

Total : $240 + 1768 = 2008$ (1)

Answer 2008 cm^2

2 The L-shape is made from rectangles.



Not drawn accurately

The area is 44 cm^2

Work out the perimeter.

[3 marks]

Area A = $2 \times 7 = 14$ (1)

Area B = $3 \times m = 3m$

$3m + 14 = 44$

$3m = 30$

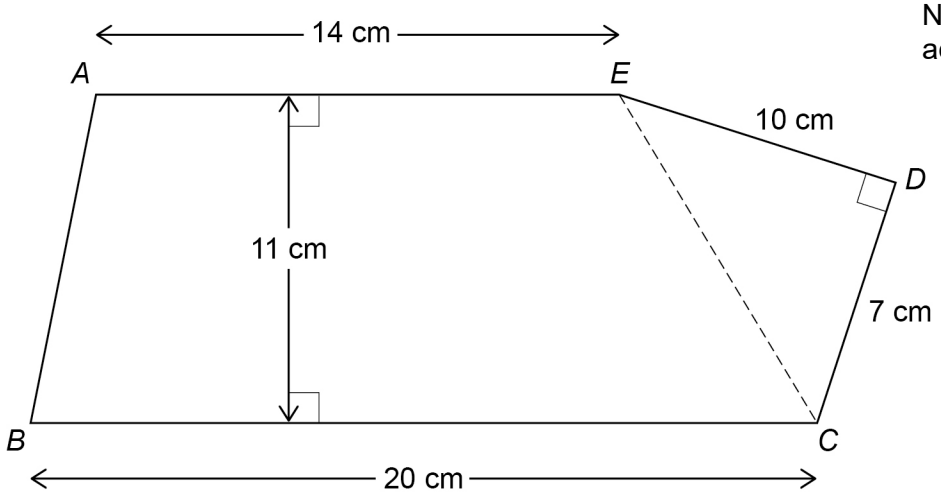
$m = 10$ (1)

Perimeter = $2 + 4 + 10 + 3 + 10 + 2 + 7$

$= 38$ (1)

Answer 38 cm

3 *ABCDE* is a pentagon.



Not drawn accurately

Work out the area of the pentagon.

[3 marks]

Area of trapezium : $\frac{1}{2} \times (14+20) \times 11 = 187 \text{ cm}^2$ (1)

Area of triangle : $\frac{1}{2} \times 10 \times 7 = 35 \text{ cm}^2$ (1)

Total area : $187 + 35 = 222 \text{ cm}^2$ (1)

Answer 222 cm^2