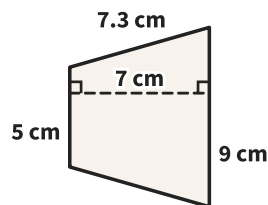


Area of 2D Shapes

1

Work out the area of this trapezium.



Not drawn accurately

the parallel sides are 5 cm and 9 cm

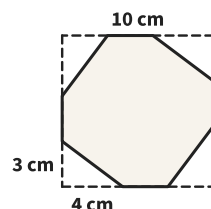
$$\frac{1}{2} \times (5 + 9) \times 7$$

$$49 \text{ cm}^2$$

Answer

2

Four identical right-angled triangles are cut from the corners of a square. Work out the area of the shape that is left.



Not drawn accurately

$$\text{one triangle } \frac{1}{2} \times 4 \times 3 = 6$$

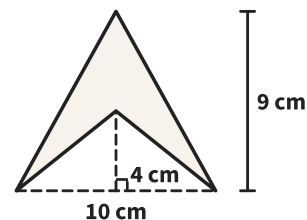
$$10 \times 10 - 4 \times 6$$

$$76 \text{ cm}^2$$

Answer

3

Work out the area of this arrowhead.



Not drawn accurately

$$\text{big triangle } \frac{1}{2} \times 10 \times 9 = 45$$

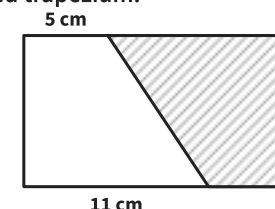
$$\text{small triangle } \frac{1}{2} \times 10 \times 4 = 20$$

$$25 \text{ cm}^2$$

Answer

4

A 16 cm by 9 cm rectangle is cut into two trapezia. Work out the area of the shaded trapezium.



Not drawn accurately

$$\text{parallel sides } 16 - 5 = 11 \text{ and } 16 - 11 = 5$$

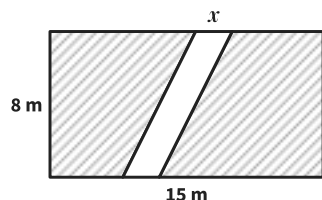
$$\frac{1}{2} \times (11 + 5) \times 9$$

$$72 \text{ cm}^2$$

Answer

5

A path with parallel edges crosses a rectangular lawn. The shaded grass has an area of 104 m^2 . Work out x .



Not drawn accurately

$$\text{path} = 15 \times 8 - 104 = 16 \text{ m}^2$$

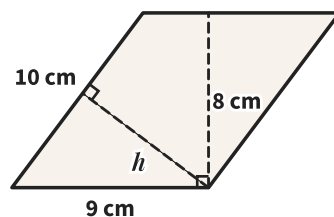
$$x \times 8 = 16 \text{ (a parallelogram)}$$

$$x = 2 \text{ m}$$

Answer

6

Work out the length h .



Not drawn accurately

$$\text{area} = 9 \times 8 = 72 \text{ cm}^2$$

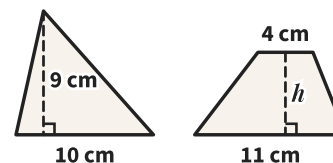
$$10 \times h = 72$$

$$h = 7.2 \text{ cm}$$

Answer

7

The triangle and the trapezium have the same area. Work out the height h of the trapezium.



Not drawn accurately

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

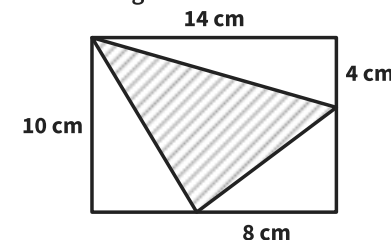
$$\frac{1}{2} \times (4 + 11) \times h = 45$$

$$h = 6 \text{ cm}$$

Answer

8

The outside shape is a rectangle. Work out the area of the shaded triangle.



Not drawn accurately

$$\text{rectangle } 14 \times 10 = 140 \text{ cm}^2$$

$$\text{triangles } 28 + 24 + 30 = 82$$

$$58 \text{ cm}^2$$

Answer