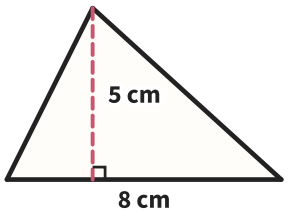
Area of 2D Shapes

ANSWERS

1

Work out the area of this triangle.



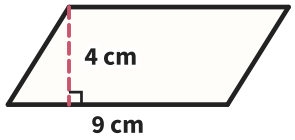
A = ½ × base × height

$A = ½ \times 8 \times 5 = 20\ cm^2$

Answer $20\ cm^2$

2

Work out the area of this parallelogram.



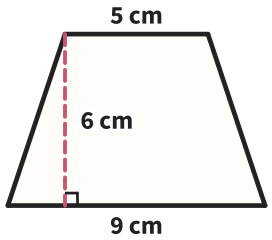
A = base × height

$A = 9 \times 4 = 36\ cm^2$

Answer $36\ cm^2$

3

Work out the area of this trapezium.



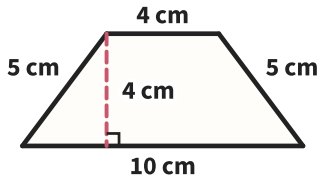
A = ½ × (a + b) × height

$A = ½ \times (5 + 9) \times 6 = 42\ cm^2$

Answer $42\ cm^2$

4

Work out the area of this trapezium.



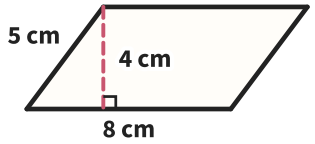
A = ½ × (a + b) × height

$A = ½ \times (4 + 10) \times 4 = 28\ cm^2$

Answer $28\ cm^2$

5

Work out the area of this parallelogram.

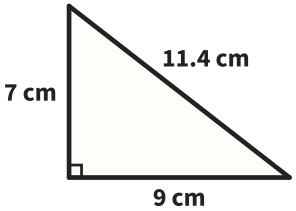


8×4

Answer $32\ cm^2$

6

Work out the area of this right-angled triangle.

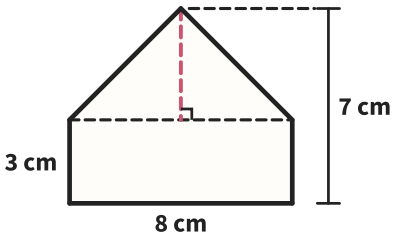


$½ \times 9 \times 7$

Answer $31.5\ cm^2$

7

This shape is a rectangle with a triangle on top. Work out its area.



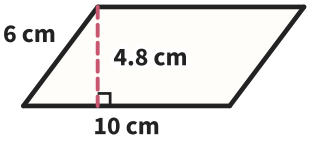
$8 \times 3 = 24,\ ½ \times 8 \times 4 = 16$

$24 + 16$

Answer $40\ cm^2$

8

Maya says the area of this parallelogram is $10 \times 6 = 60\ cm^2$. Explain Maya's mistake, and work out the right area.



6 cm is the sloping side

10×4.8

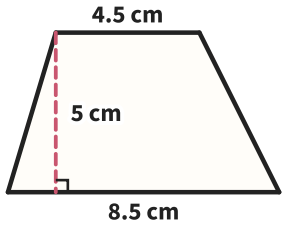
Answer $48\ cm^2$

Area of 2D Shapes *further practice*

ANSWERS

9

Work out the area of this trapezium.

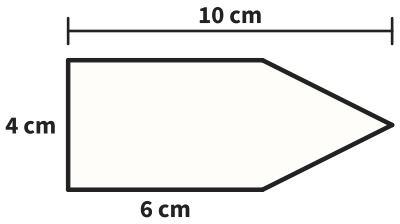


½ × (4.5 + 8.5) × 5

Answer 32.5 cm²

10

A direction sign is a rectangle with a triangle on one end. Work out its area.

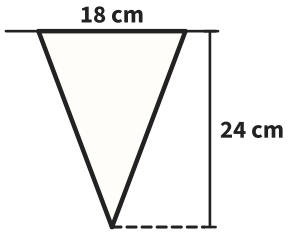


6 × 4 = 24, ½ × 4 × (10 – 6) = 8

Answer 32 cm²

11

A flag on some bunting is a triangle 18 cm across the top and 24 cm from the top to its point. Work out the area of the flag.

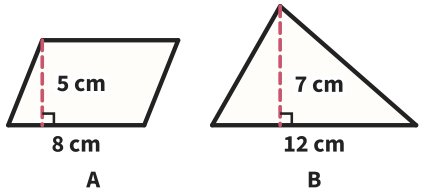


½ × 18 × 24

Answer 216 cm²

12

Which shape has the bigger area, A or B? By how much?

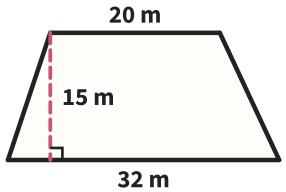


A: 8 × 5 = 40, B: ½ × 12 × 7 = 42

Answer B, by 2 cm²

13

A section of a car park is a trapezium. Work out its area.



½ × (20 + 32) × 15

Answer 390 m²

14

A kitchen splashback is a rectangle 2.4 m long and 0.5 m high. Tiles cost £18 per m². How much do the tiles for the splashback cost?

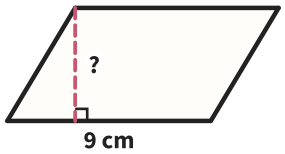
2.4 × 0.5 = 1.2 m²

1.2 × 18

Answer £21.60

15

This parallelogram has an area of 45 cm². Work out its perpendicular height.

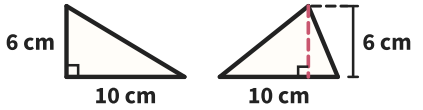


9 × height = 45, 45 ÷ 9

Answer 5 cm

16

Tomasz says the second triangle has the bigger area because it leans over more. Is he right? Explain.



No. Both are ½ × 10 × 6 = 30 cm².
Same base and perpendicular height.

Answer No, both 30 cm²