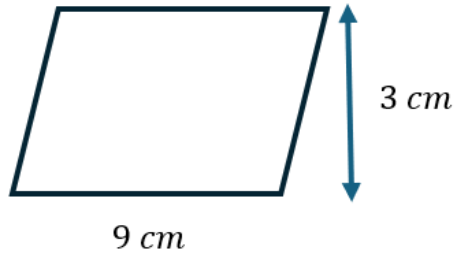
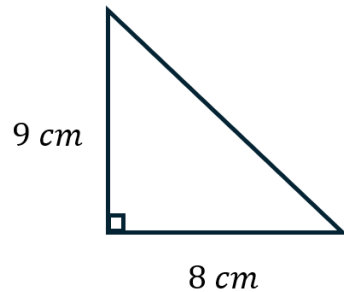


# AREA AND PERIMETER

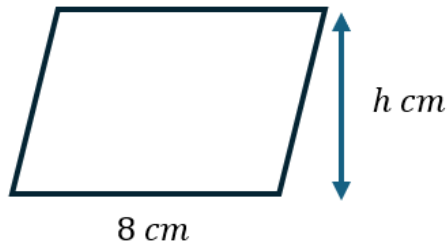
- 1) Work out the area of the parallelogram.



- 2) Work out the area of the triangle.



- 3) The area of the parallelogram is  $48\text{ cm}^2$ . Work out the missing height.

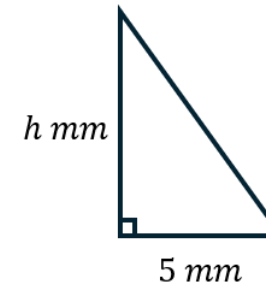


- 4) The diagram of a square is shown below.



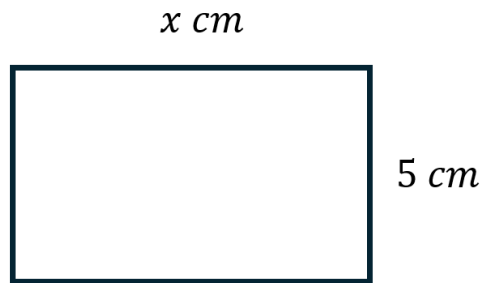
- Work out the area of the square.
- Work out the perimeter of the square.

- 5) The triangle has an area of  $37.5\text{ mm}^2$ . Work out the value of  $h$ .

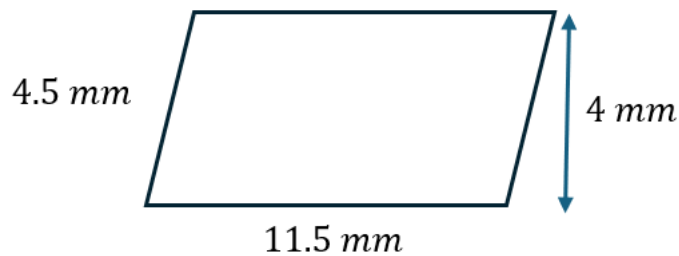


- A square has an area of  $81\text{ cm}^2$ . Work out the perimeter of the square.
- A square has a perimeter of  $48\text{ cm}$ . Work out the area of the square.
- A triangle has an area of  $35\text{ cm}^2$  and a base of  $7\text{ cm}$ . Work out the height of the triangle.

- 9) Given that the perimeter of the rectangle shown below is 30 cm, work out the missing length  $x$ .

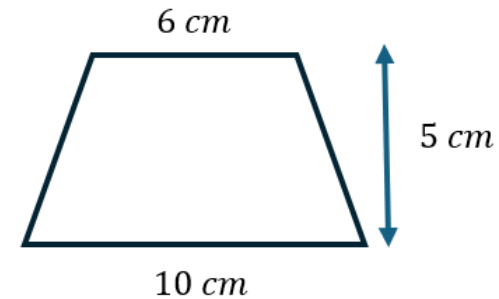


- 10) The diagram shows a parallelogram.

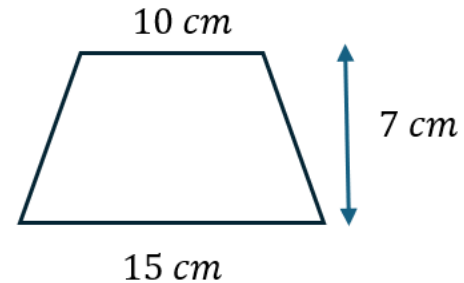


- a. Work out the area of the parallelogram.  
b. Work out the perimeter of the parallelogram.
- 11) A rectangle has an area of  $72 \text{ mm}^2$  and a width of 6 mm. Work out the perimeter of the rectangle.
- 12) A rectangle has a perimeter of 50 cm. The length of the rectangle is 4 cm more than twice its width. Work out the area of the rectangle.

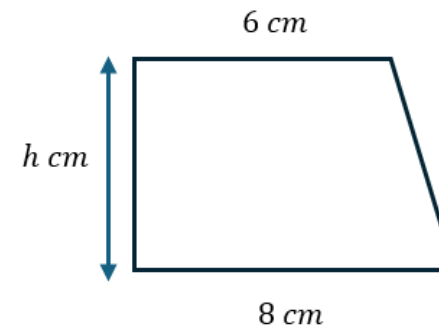
- 13) Work out the area of the trapezium.



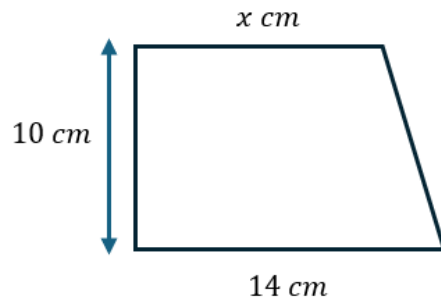
- 14) Work out the area of the trapezium.



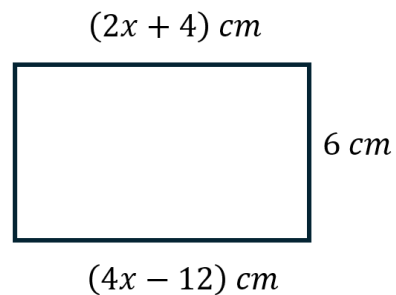
- 15) The area of the trapezium shown below is  $35 \text{ cm}^2$ . Work out the value of  $h$ .



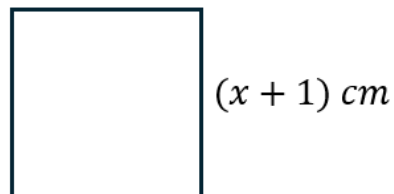
- 16) The area of the trapezium shown below is  $130 \text{ cm}^2$ . Work out the value of  $x$ .



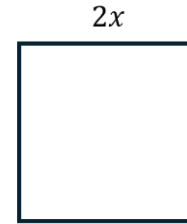
- 17) The dimensions of a rectangle are shown below. Work out the area of the rectangle.



- 18) The diagram shows a square. The area of the square is  $25 \text{ cm}^2$ . Work out the value of  $x$ .

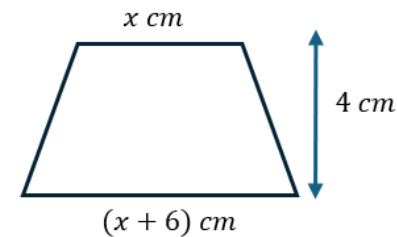


- 19) The diagram shows a square with a side length  $2x$ .

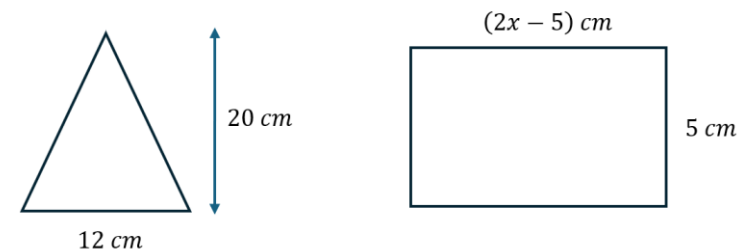


- Write a fully simplified expression for the perimeter of the square.
- Given, that the area of the square is  $144 \text{ mm}^2$ , work out the value of  $x$ .

- 20) The diagram shows a trapezium. Given that the area of the trapezium is  $52 \text{ cm}^2$ , work out the value of  $x$ . You must show clear algebraic working.

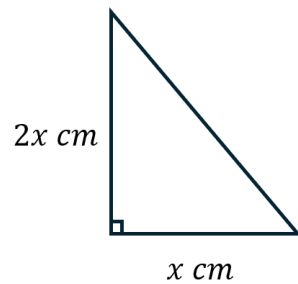


- 21) The diagram shows a triangle and a rectangle.



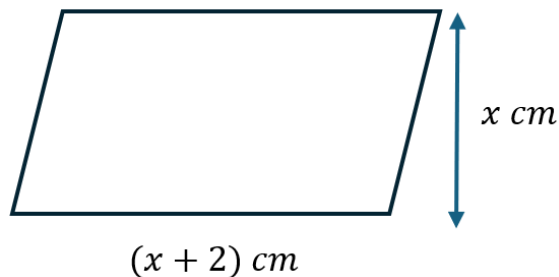
- Given that the area of the triangle is four times the area of the rectangle, work out the value of  $x$ .

- 22) A right-angled triangle is shown in the diagram below. The area of the triangle is  $64 \text{ cm}^2$ . Work out the value of  $x$ . You must show clear algebraic working.



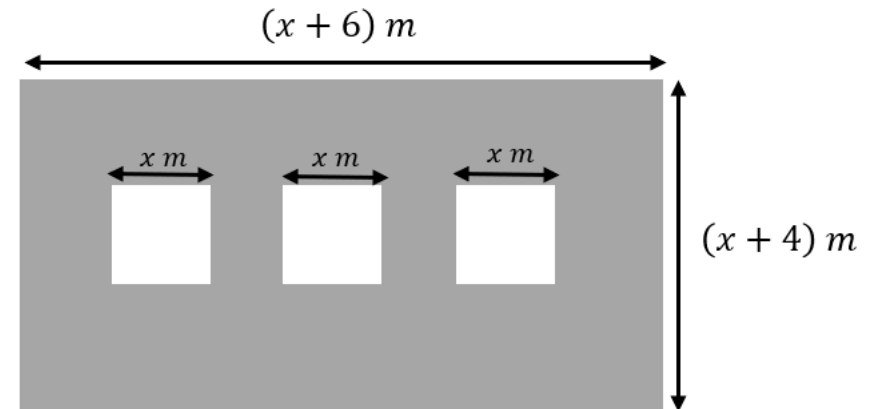
- 23) A rectangle's length is 3 cm more than its width. Given the area of the rectangle is  $40 \text{ cm}^2$ , work out its dimensions.

- 24) The parallelogram shown in the diagram below has a base of  $x + 2$  cm and a height of  $x$  cm. Given that the area of the parallelogram is  $48 \text{ cm}^2$ , work out the value of  $x$ . You must show clear algebraic working.



### Challenge

- 25) A rectangular garden is paved with three identical square slabs placed side by side, as shown in the diagram. Each square slab has a side length of  $x$  metres. The length of the rectangular garden is  $x + 6$  metres. The width of the garden is  $x + 4$  metres.



The area of the garden that is not covered by slabs is filled with decorative rocks.

Rocks cost  $\pounds 12$  per square metre.

Given that the area of the entire garden is  $48 \text{ m}^2$ , work out the cost of filling the remaining area with rocks. You must show clear algebraic working.