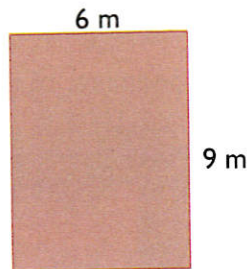


Area — 1

You might want to brush up on your multiplication skills — you're going to need them for calculating areas.

Examples

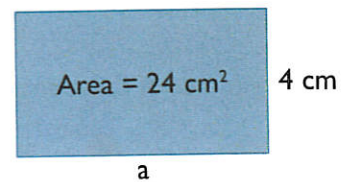
Calculate the area of the rectangle below.



This rectangle's sides are 6 m and 9 m.
So the area = $9 \times 6 = 54 \text{ m}^2$.

The sides are measured in metres,
so the area is in m^2 (metres squared).

What is the length of side a?

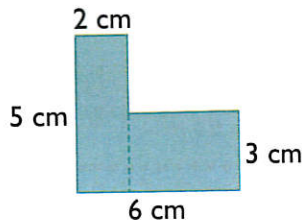


$$\text{Area} = a \times 4 = 24$$

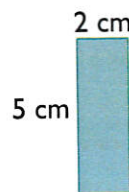
$$\text{So } a = 24 \div 4 = 6$$

Length of side a = **6 cm**

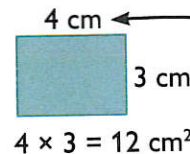
Calculate the area of the shape below.



Split the shape into two rectangles and calculate their areas.



$$5 \times 2 = 10 \text{ cm}^2$$



$$4 \times 3 = 12 \text{ cm}^2$$

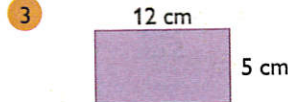
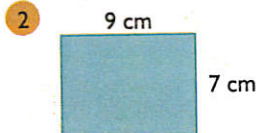
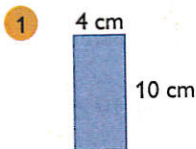
You can work out the length of this side by subtracting the short side (2 cm) from the long side (6 cm).

Then add the two areas together to get the total area of the shape.

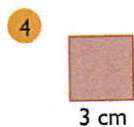
$$10 + 12 = 22 \text{ cm}^2$$

Set A

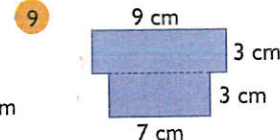
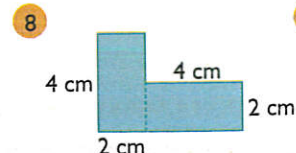
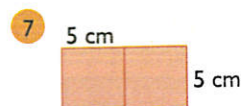
Work out the area of these shapes:



Work out the area of these squares:



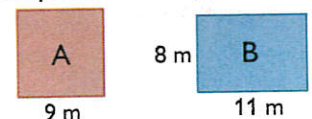
Work out the area of these shapes:



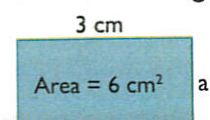
- 10 Copy the table below and fill in the missing values for squares of different lengths.

Length	Area
2 cm	4 cm^2
4 cm	
	49 cm^2

- 11 A square and rectangle are shown below. Which shape has the largest area?

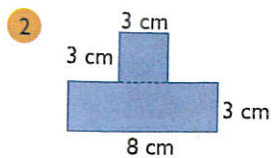
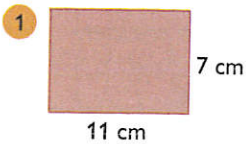


- 12 Look at the rectangle below. What is the length of side a?

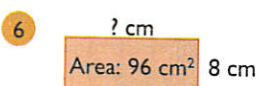
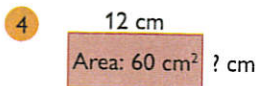
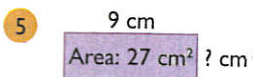
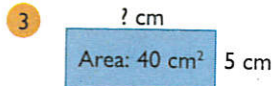


Set B

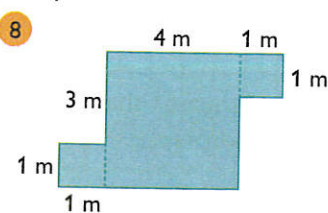
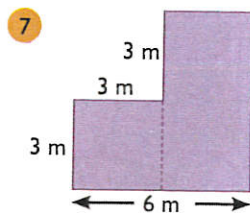
Work out the area of these shapes:



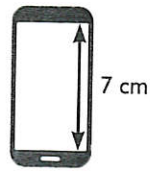
For each rectangle, identify the missing side:



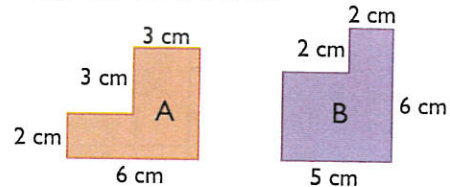
Work out the area of the shapes below:



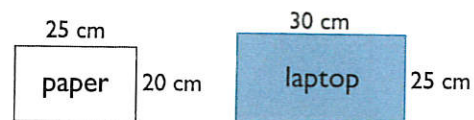
- 9 A smart phone screen has an area of 35 cm^2 .
If the length of the screen is 7 cm, what is the width of the screen?



- 10 Which of the shapes below has the smaller area?



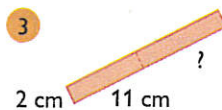
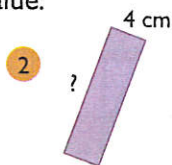
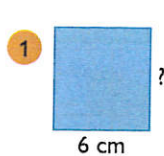
- 11 Harleen measures her laptop screen and a piece of paper. What is the difference between their areas?



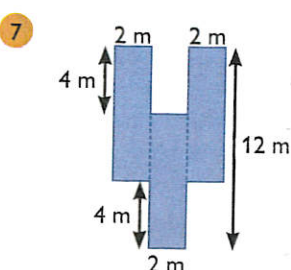
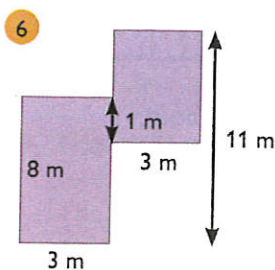
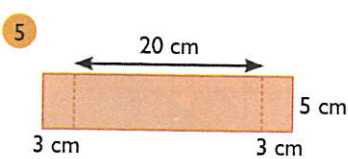
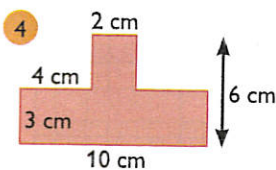
Set C

Each rectangle below has an area of 48 cm^2 .

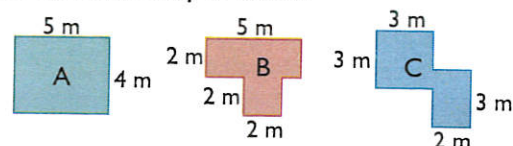
Work out the missing value:



Work out the area of these shapes:



Look at the shapes below.



- 8 Order the shapes from smallest to largest area.
9 What is the difference in area between A and C?
10 This rectangle has an area of 72 cm^2 .



What is the perimeter of the rectangle?

The diagram shows a purple rectangle with a square cut out of it.

Calculate the area:

- 11 of the square cut out.

- 12 of remaining purple part.

