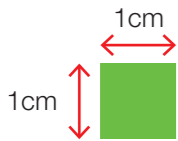# Area

Learn

Area is measured in **square units**.
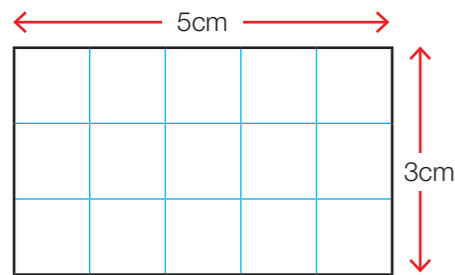
This square is 1cm long and 1cm wide. Its area is 1cm².

1cm

1cm

We can count squares to calculate simple areas.

4cm

2cm

Area of rectangle = 8cm²

The formula for calculating the **A**rea of rectangles and squares is the **l**ength times the **w**idth. ***A = l × w***
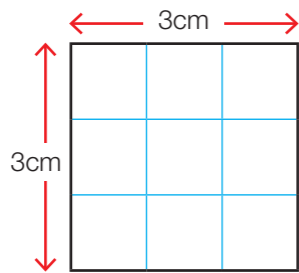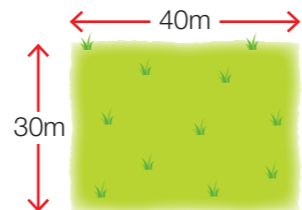
The area of this rectangle is ***A = 5 × 3 = 15cm²***.

5cm

3cm

Don't forget to square the units!

For squares, the length and the width are the same. The area of this square is ***A = 3 × 3 = 9cm²***.

3cm

3cm

This field is 40m long and 30m wide. The area of the field is *A = 40 × 30 = 1200m²*.

40m

30m

✓ Tips

- If an irregular shape is drawn on 1cm² paper we can still estimate its area. Just count the squares!
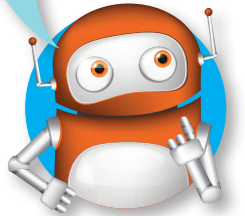
Two half squares make one whole cm².

Talk maths

Look at these areas, and then tell a partner what the lengths and widths could be. Can they draw them?

There should be more than one answer for each rectangle. How many can you find?

Shape	Rectangle	Rectangle	Rectangle	Square	Square	Square
Area	6cm²	12cm²	30cm²	9cm²	16cm²	25cm²

Activities

1. **Estimate the areas of these shapes assuming each square is 1cm².**

   a.   b.   c.
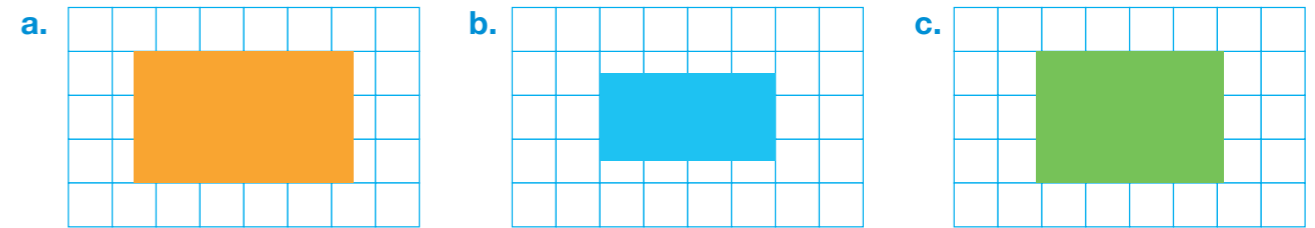
2. **Calculate the areas of these shapes.**
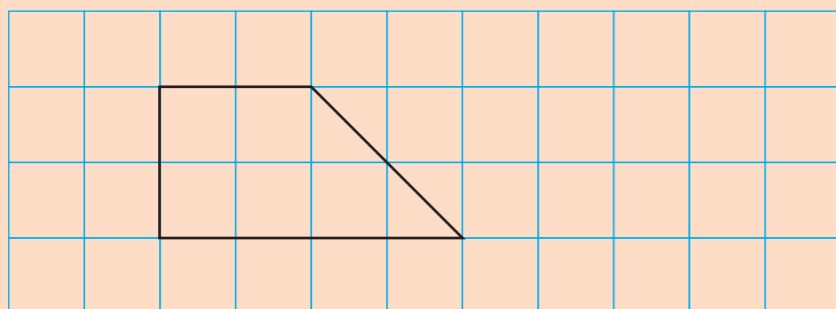   a. A rectangle with length 12cm and width 9cm.
   b. A square with side length 7m.
   c. A rectangle with length 25m and width 12m.

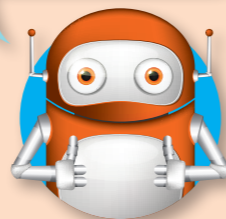3. **Write which shape has the larger area.**
   a. A rectangle, length 5cm and width 1cm OR a square of side 2cm?
   b. A rectangle, length 8cm and width 3cm OR a square of side 5cm?
   c. A rectangle, length 7m and width 5m OR a square of side 6m?
   d. A rectangle, length 17km and width 9km OR a square of side 12km?

Problems

Brain-teaser
Annie's garden is 3m long and 5m wide. It was all grass but Annie has cut a square flowerbed, with side length of 1m, in the centre. What area of grass is left?

Brain-buster
A farmer plants nine potatoes in every square metre of earth. How many potatoes will she grow in a field 120m long and 75m wide?