



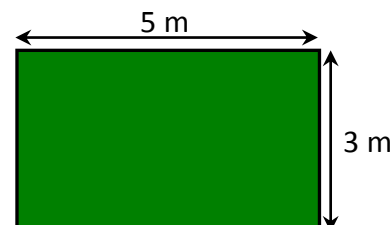
In this activity you will find the perimeter and area of rectangles and shapes made from rectangles.

Student information sheet

Perimeter

The **perimeter** of a shape is the total length of its sides.

The perimeter of this rectangular lawn = $5 + 3 + 5 + 3 = 16$ m



Think about

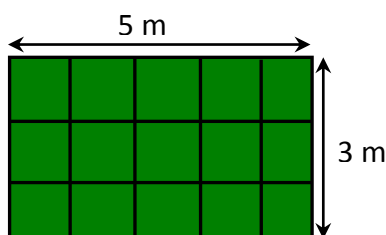
Are there any other ways of working out the perimeter?

Area

Area measures the **surface** of something, usually in square metres (m^2), square centimetres (cm^2) or square millimetres (mm^2).

The area of this lawn is 15 m^2 .

(Each square has an area of 1 m^2 .)



Summary

$$\text{Perimeter of a rectangle} = \text{length} + \text{width} + \text{length} + \text{width}$$
$$\text{or } (\text{length} + \text{width}) \times 2$$
$$\text{Area of a rectangle} = \text{length} \times \text{width}$$

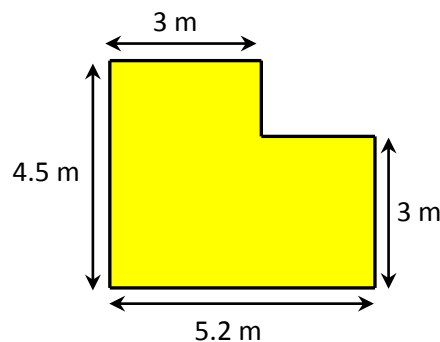
Sometimes shapes are made from two or more rectangles.

Example

The diagram shows an L-shaped floor.

The perimeter of the floor

$$= 3 + 1.5 + 2.2 + 3 + 5.2 + 4.5 = 19.4 \text{ m}$$



Think about

Where did the 1.5 and 2.2 come from?

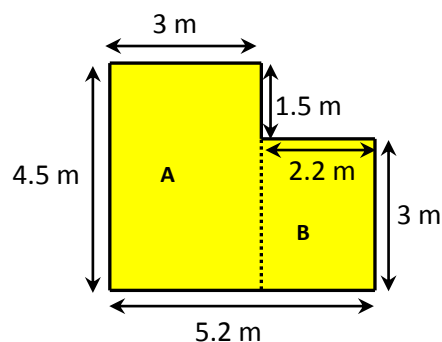
How could you find the area of this floor?

The area can be split into two rectangles, A and B.

$$\text{Area of A} = 4.5 \times 3 = 13.5 \text{ m}^2$$

$$\text{Area of B} = 3 \times 2.2 = 6.6 \text{ m}^2$$

$$\text{Total area} = 13.5 + 6.6 = 20.1 \text{ m}^2$$



Think about

Are there any other ways of finding the area of the floor?

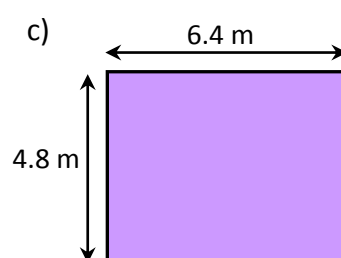
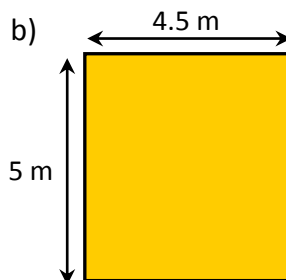
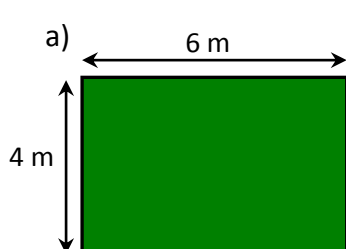
Do they give the same answer?

Why are the units m^2 ?

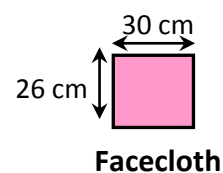
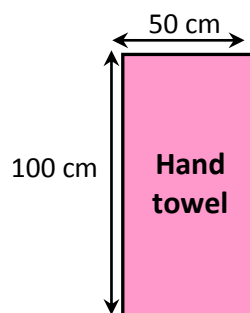
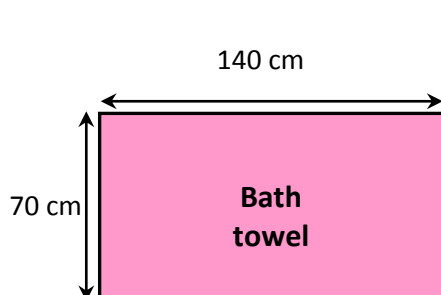
Student worksheet

Try these

1. Each diagram shows the dimensions of a floor.
Find the perimeter and area of each floor.



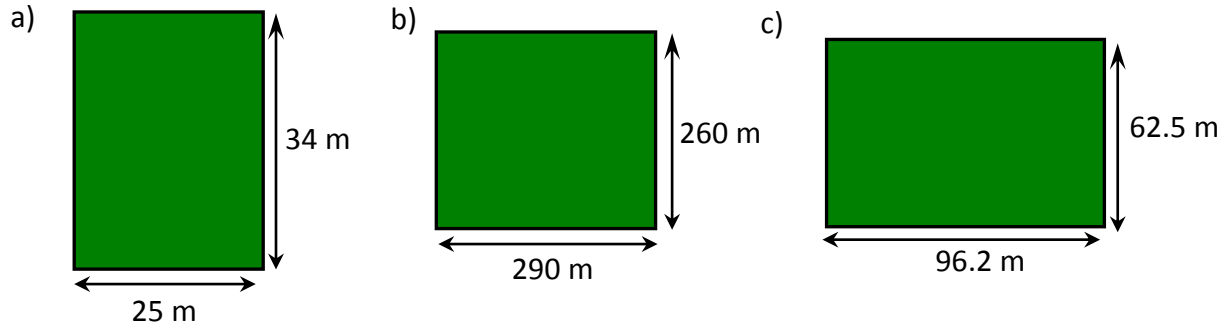
2. Find the perimeter and area of each towel and the facecloth.



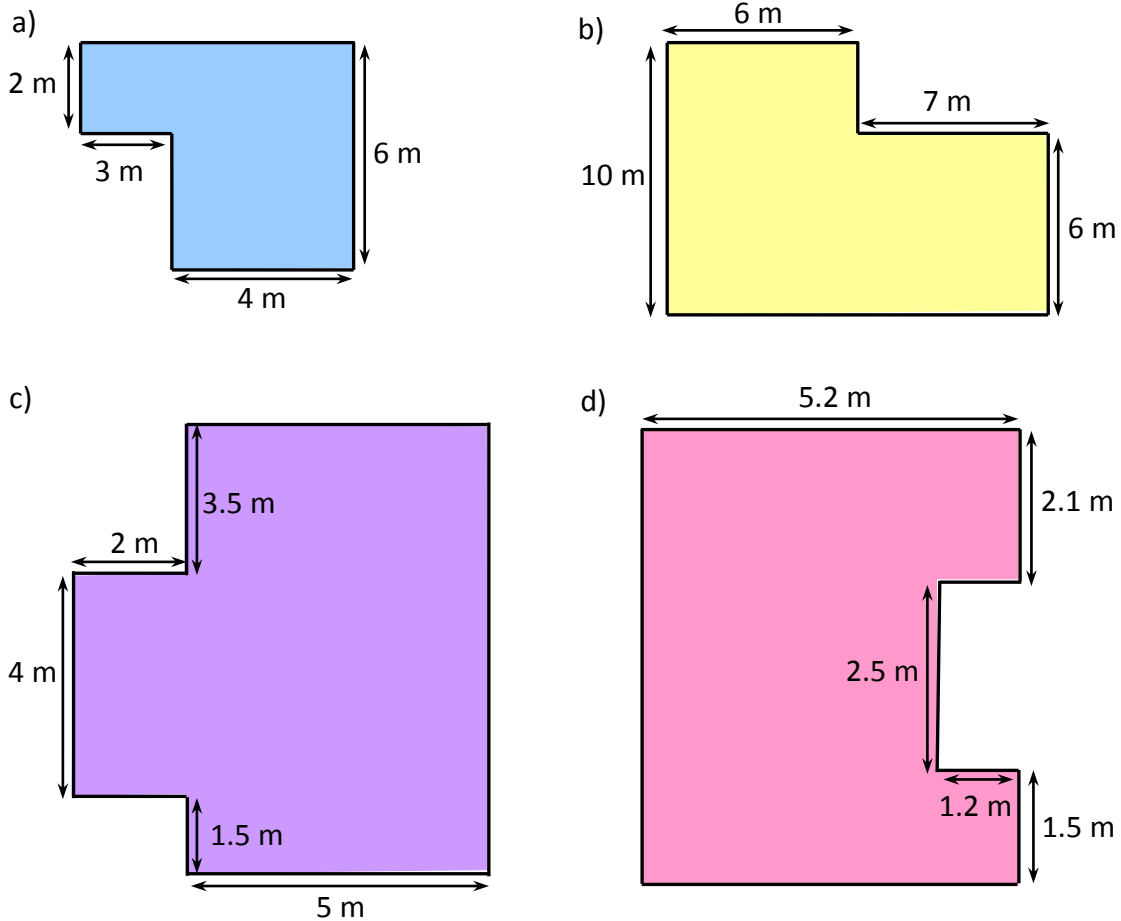
3 Find the perimeter and area of this £5 note.



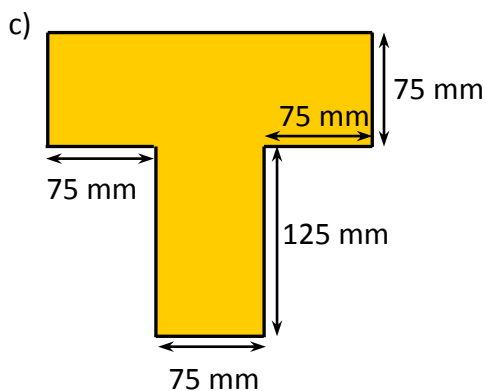
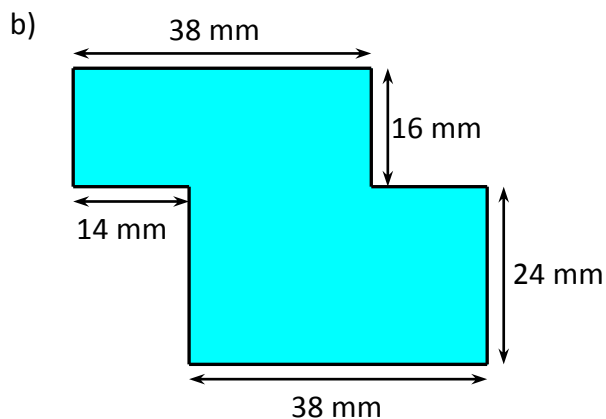
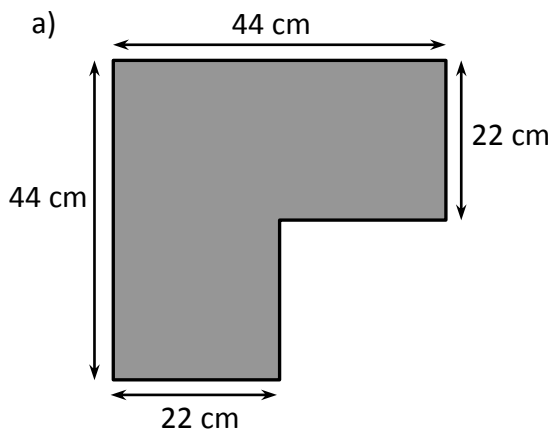
4. Work out the perimeter and area of each field.



5. Find the perimeter and area of each room.



6. Work out the perimeter and area of each shape.



Reflection

What does the word perimeter mean? How do you find the perimeter of a shape? What units are used for perimeters?

How do you find the area of a rectangle? What units are used for areas?

Describe how you would find the area of these shapes.

