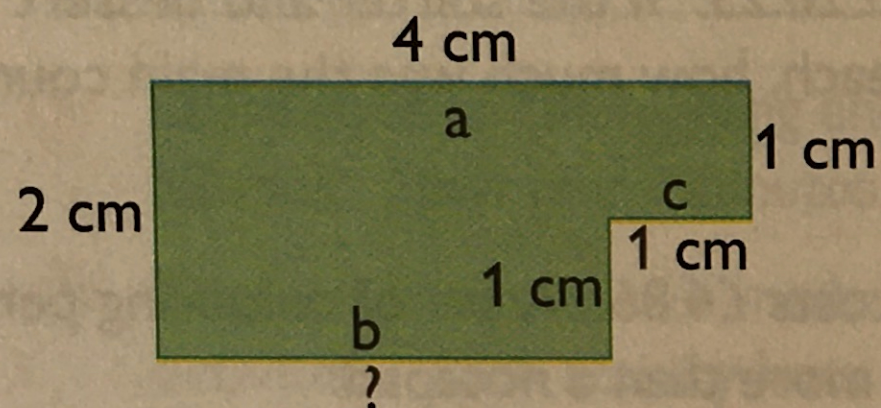


# Perimeter

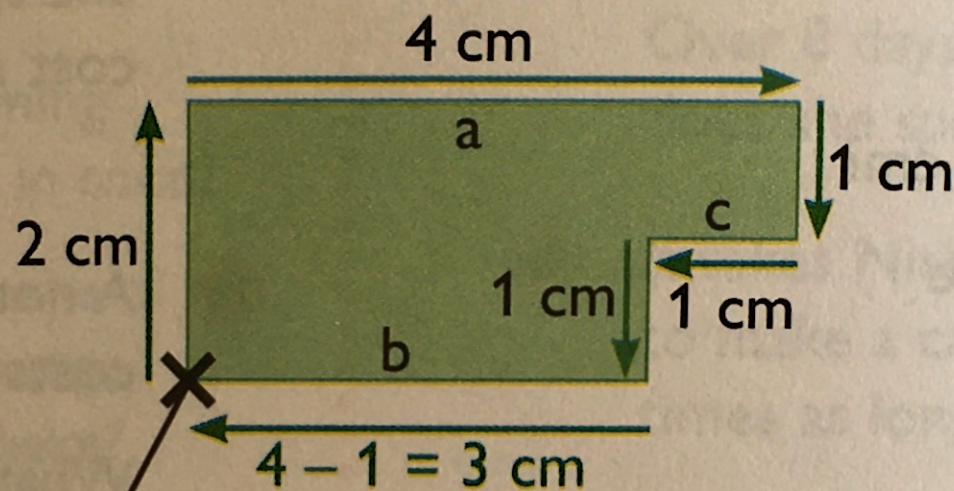
Perimeter is the distance around the outside of a shape. These pages are about shapes made up of squares and rectangles — you might need to do a bit of detective work to find missing lengths before working out the perimeter.

## Examples

Calculate the perimeter of the shape below.



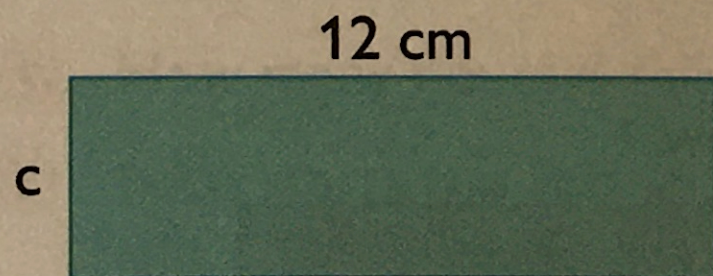
Find the missing length:  
side  $b = \text{side } a - \text{side } c$   
 $= 4 \text{ cm} - 1 \text{ cm} = 3 \text{ cm}$



Pick a corner and go around the shape, adding the lengths of all the sides.

So the perimeter is:  
 $2 + 4 + 1 + 1 + 1 + 3 = 12 \text{ cm}$ .

The rectangle below has a perimeter of 36 cm. Find the length of side  $c$ .



Perimeter = 36 cm

Opposite sides of a rectangle are equal, so the perimeter is:

$$c + 12 + c + 12 = 36$$

$$2c + 24 = 36$$

$$2c = 36 - 24 = 12$$

$$c = 12 \div 2$$

$$c = 6$$

So the length of side  $c = 6 \text{ cm}$ .