

Measurement

Year 5 – 4Elms

Monday 8th June

Measurement – Lesson 1

LO: To be able to identify and measure the perimeter of a rectilinear shape.

What is perimeter?

The **perimeter** is the distance all the way around the **outside** of a 2D shape.

To work out the perimeter, add up the lengths of all the sides.



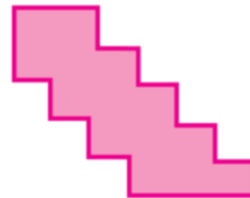
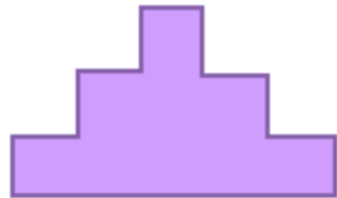
The perimeter of this shape is $10 + 10 + 6 + 6 = 32$

[Click here to find out more](#)

What is a rectilinear shape (also known as a compound rectilinear shape)?

A rectilinear shape is a shape which has sides that all meet at right angles.

For example:



How to calculate the perimeter of a rectilinear shape:

You will need a pencil, ruler and some paper.

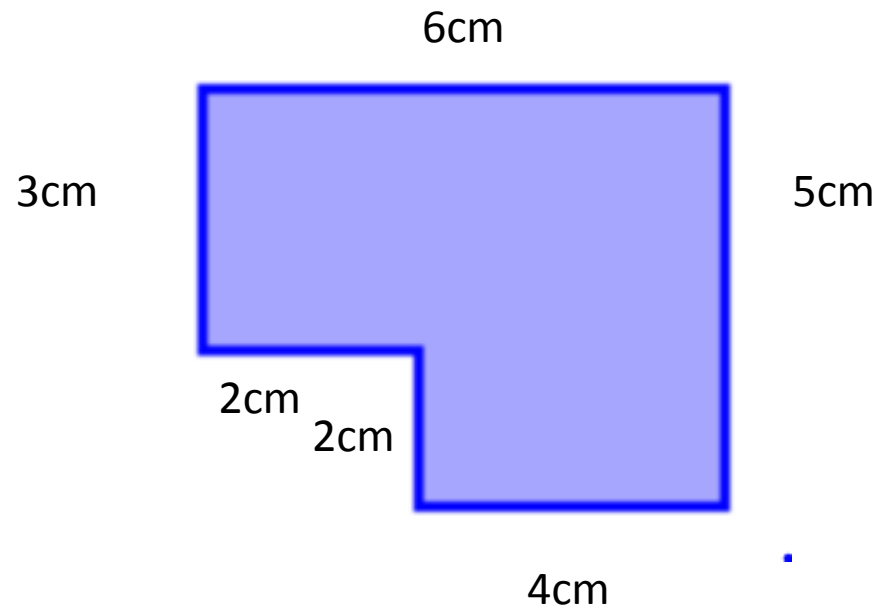
If you have a shape like this:



You will need to measure each side with your ruler and then record the measurements.

Finally, you will need to add the measurements to find the perimeter of the 2D shape.

An example would be:

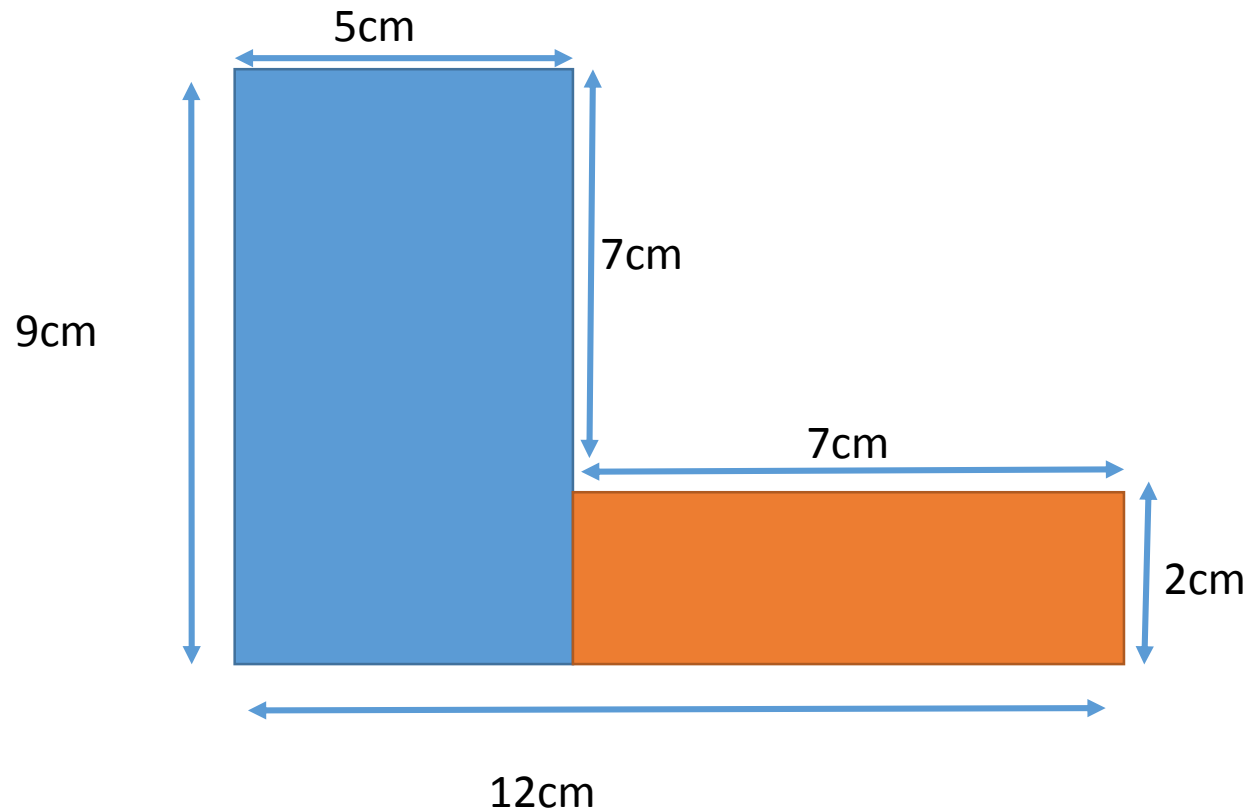


To solve this problem I must measure every side and then total the answers up.

Please note that this shape is not to scale it is just an example.

$$6+5+4+2+2+3 = 22\text{cm}$$

Sometimes rectilinear shapes are also called compound rectilinear shapes. This is because the shape looks as if it is made from two separate shapes joined together:



$$12+9+5+7+7+2 = 42\text{cm}$$

You can even create your own compound
rectilinear shapes at home:

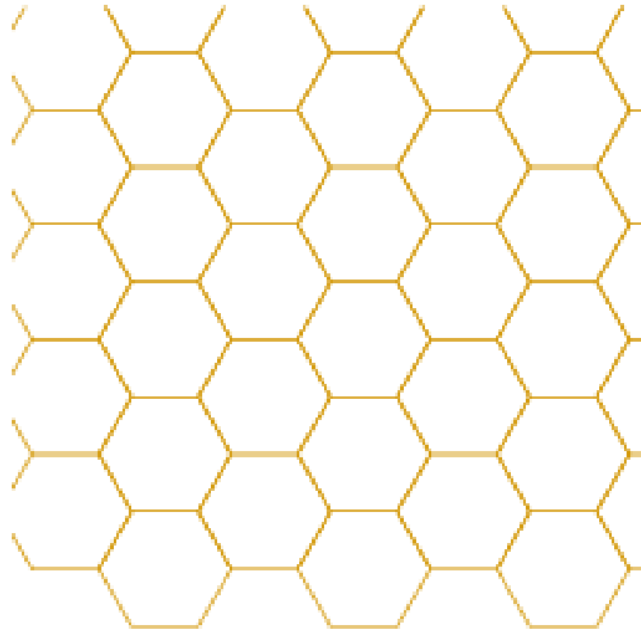


$$20+9+9+6+11+15 = 70\text{cm}$$

Challenge Question

Each regular hexagon has a side length of 2 cm

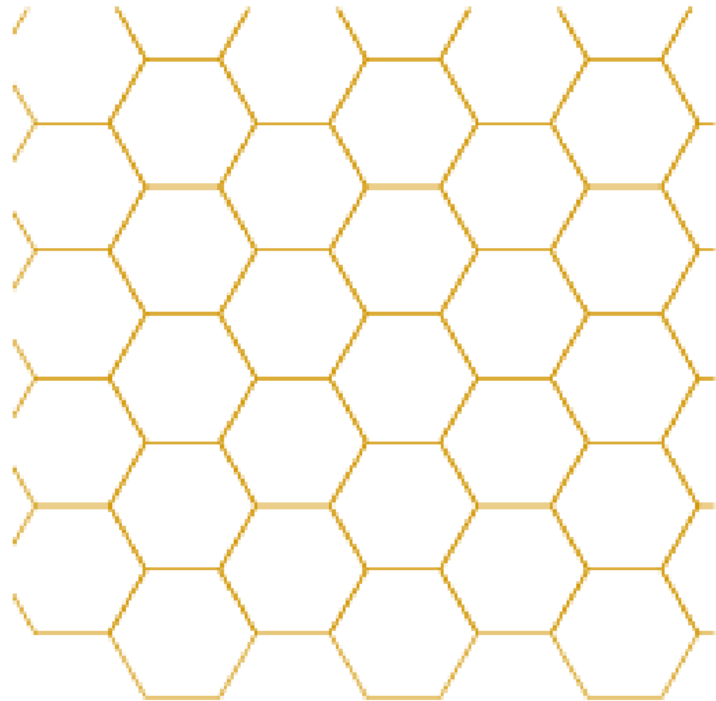
Can you construct a shape with a perimeter of 44 cm?



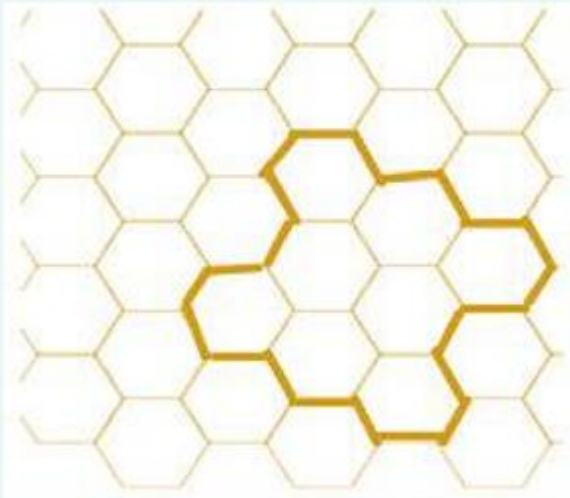
Answers

Each regular hexagon has a side length of 2 cm

Can you construct a shape with a perimeter of 44 cm?



Possible answer:



The important fact to note here is that you must have 22 sides because each side is 2cm long and we want the total perimeter to equal 44cm.