

Please make sure that you print this resource at 100% so that all measurements are correct.

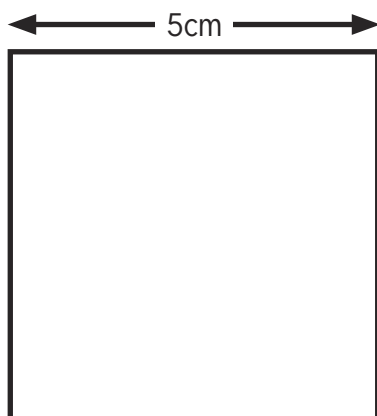
To do this, follow the relevant steps below.

Adobe Reader or Adobe Acrobat

- Adobe Reader is a free PDF viewer, from Adobe. To install a copy of Adobe Reader, go to <https://get.adobe.com/uk/reader/>.
- Once Adobe Reader is installed, open your PDF.
- Go to File>Print.
- Under 'Page Sizing & Handling', select 'Size'.
- From here, make sure that 'Actual Size' is selected.
- Print this page as a test, making sure that the shape below is the correct size once printed.
- If the test print is correct, print your PDF.

Foxit Reader

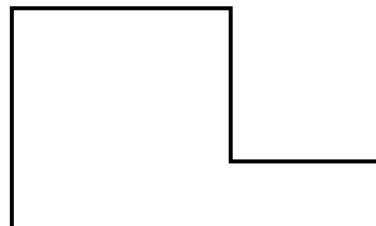
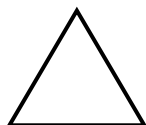
- Go to File>Print.



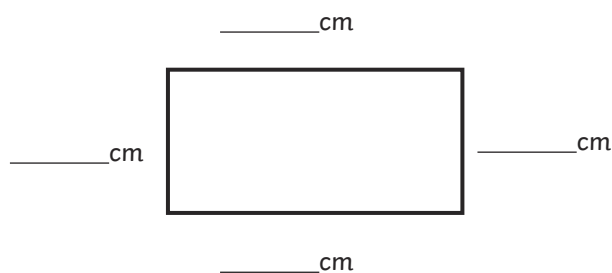
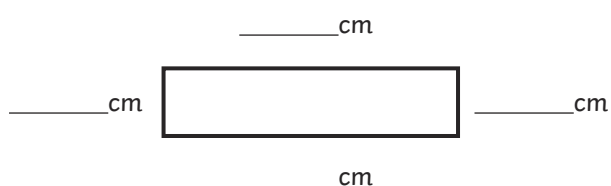


- 1) Find the perimeter of these shapes in centimetres.
Make sure you use a ruler carefully so that your measurements are accurate.

a) Perimeter = _____ b) Perimeter = _____ c) Perimeter = _____



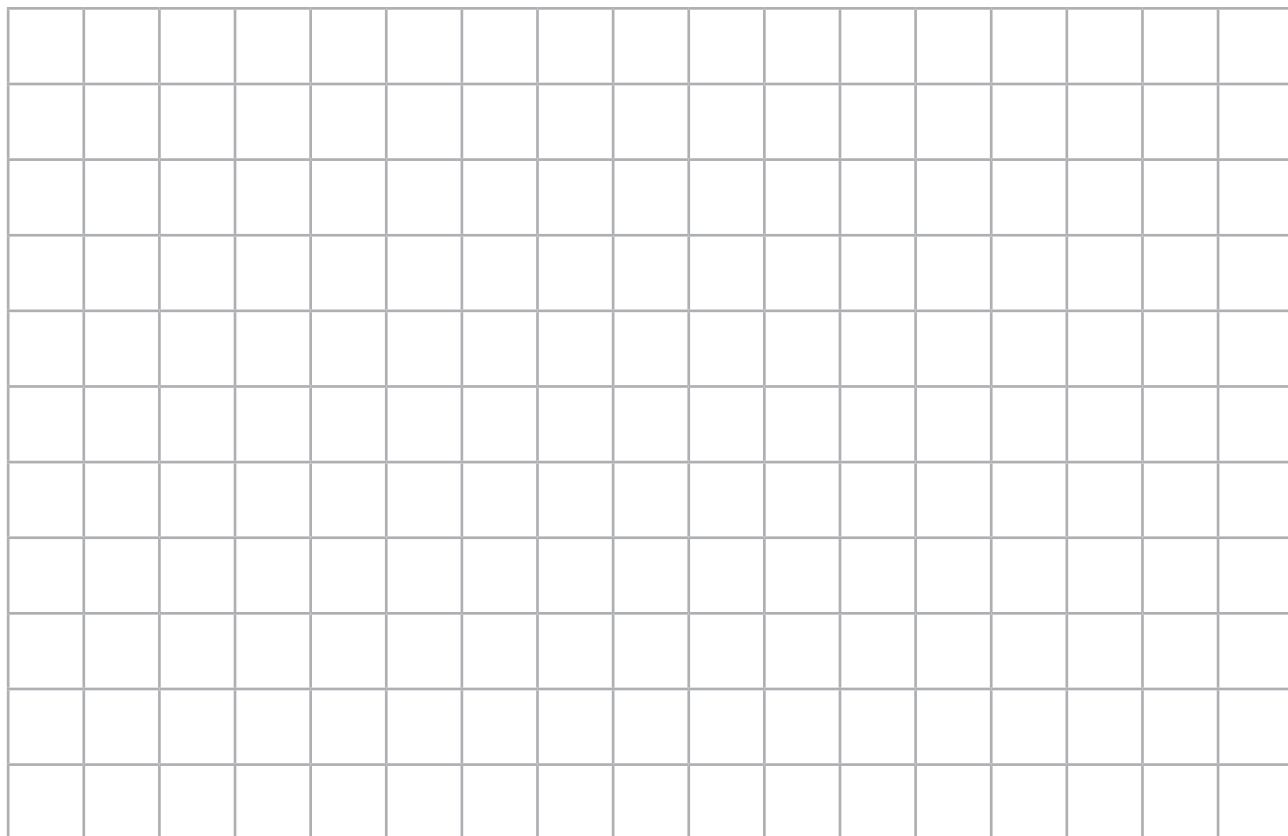
- 2) a) Measure and label the sides of these rectangles in centimetres.



- b) Use two rectangles identical to these to draw a compound rectilinear shape.

What is the perimeter of your shape?

Does the perimeter change when you use the same rectangles to make a different compound rectilinear shape?



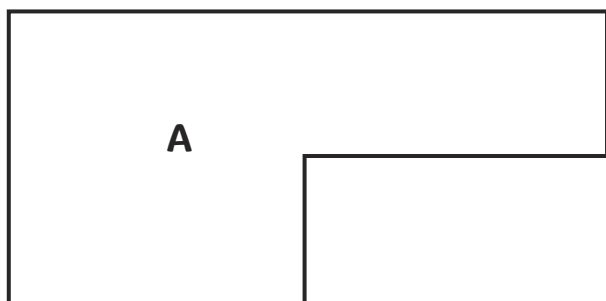


1)

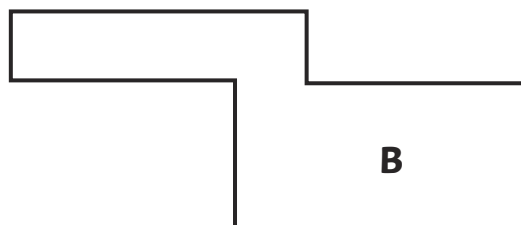


Meera

I think shape B has a longer perimeter than shape A because it has more sides.



A



B

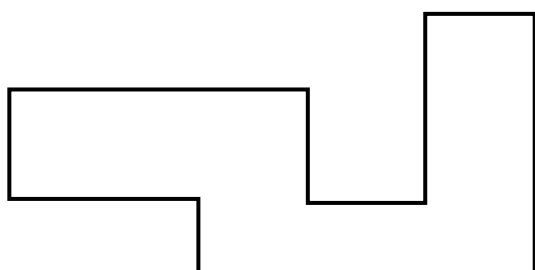
Do you agree with Meera? Explain your reasoning.

2)



David

A rectangle with one side measuring 7.5cm and the adjacent side measuring 4.5cm would have the same perimeter as this compound rectilinear shape.



Do you agree with David? Explain your reasoning.



- 1) How many different rectangles can you draw that have a perimeter of 60cm? (Each side length needs to be a whole number.)

Do you have to draw all your answers or can you find a systematic way of recording the lengths of the sides?

- 2) Here is the shape of a field. It is drawn to a scale of 1cm:10m. This means that 1cm on the drawing represents 10m in real life.

The farmer has 250m of wooden fencing and 150m of electric fencing to use around the perimeter of the field.

Find all the possible combinations of fencing in multiples of 5m that the farmer can use to completely enclose the field.

Find a systematic way to record your findings.

