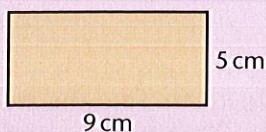


B

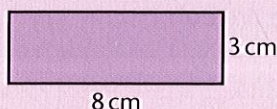
- 1 a) Draw this rectangle.



Work out the area.

- b) Draw a different rectangle with the same perimeter but a smaller area.
 c) Draw another rectangle with the same perimeter but this time with a larger area.
 d) Label the dimensions and areas of each rectangle.

- 2 a) Draw this rectangle.



Work out the perimeter.

- b) Draw a different rectangle with the same area but a longer perimeter.
 c) Draw another rectangle with the same area but a shorter perimeter.
 d) Label the dimensions and write down the perimeter of each rectangle.

- 3 a) Draw a square with a perimeter of 16 cm.

- b) Draw two different rectangles with the same perimeter as the square.
 c) Work out the area of each shape.
 d) Which shape has the largest area?

- 4 a) Draw a square with an area of 36 cm^2 .

- b) Draw two different rectangles with the same area as the square.
 c) Work out the perimeters of each shape.
 d) Which shape has the shortest perimeter?

C

- 1 A factory is 60 m long and has an area of 3000 m^2 . Its warehouse has the same perimeter but is 15 m longer. What is the area of the warehouse?

- 2 Letitia's bedroom is 6 m long and 3.6 m wide. Brandon's room has the same area but is 40 cm wider. How long is Brandon's room?

- 3 Copy this table showing the measurements of rectilinear shapes with a perimeter of 20 cm.

Length	Width	Area
5 cm	5 cm	25 cm^2
6 cm		
7 cm		
8 cm		
9 cm		

- 4 Describe how the area of the rectangles changes with the length by completing this sentence:

The longer the rectangle, the the area.

- 5 Repeat the table for other rectangles which have the same perimeter as a square (24 cm, 28 cm, 32 cm, etc). Can you see a pattern in the areas of the rectangles? Describe it.

- 6 Investigate the area of rectangles with the same perimeter but which do not share that perimeter with a square (18 cm, 22 cm, 26 cm, etc). Do you find the same relationship between length of rectangle and size of area?

Is there a pattern in the areas of the rectangles? Describe it.