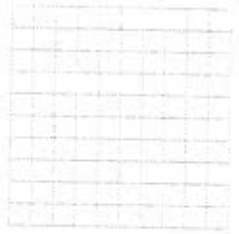


**Practise**

1. Graph the data in each table. Draw a line or curve of best fit. Explain your choice.

a)

x	y
0	3
1	5
2	7
3	9
4	11
5	13



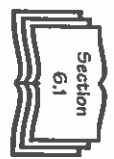
The points \_\_\_\_\_ (lie, do not lie) in a line, so I drew a \_\_\_\_\_ (line, curve) of best fit.

b)

x	y
0	0
2	8
4	32
6	72
8	128
10	200



The points \_\_\_\_\_ (lie, do not lie) in a line, so I drew a \_\_\_\_\_ (line, curve) of best fit.



Section 6.1

**Section 6.1**

3. David has 30 m of fencing to create as large a dog run as possible.

- a) The formula to calculate perimeter is  $P =$  \_\_\_\_\_  
 The formula to calculate area is  $A =$  \_\_\_\_\_  
 b) Complete the table using various lengths and widths for a dog run with a perimeter of 30 m. Change the length and width by 1 m each time.

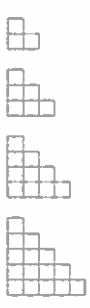
Length (m)	Width (m)	Area (m <sup>2</sup> )

- c) Graph the data for the area related to width.



- d) The relation between area and width is \_\_\_\_\_ because \_\_\_\_\_.

4. The first four figures in a pattern are given below.

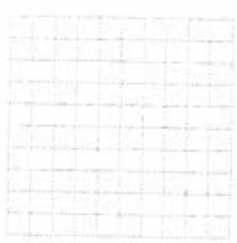


Complete the table for the first six figures that would be in the sequence. Some entries have been filled in.

Figure	Base	Height	Area
1	2	2	3
2	3	3	6
3	4	4	10
4			15
5			
6			

2. The relation  $SA = 6s^2$  represents the formula for the surface area of a cube with a side length of  $s$ .

- a) Find the surface area of a cube with a side length from 1 cm to 6 cm. Record the surface area values in the table.  
 b) Graph the data in the table. Draw a curve of best fit through the points. Label your graph completely.



Side Length (cm)	Surface Area (cm <sup>2</sup> )
1	
2	
3	
4	
5	
6	