

Straight Line Graphs

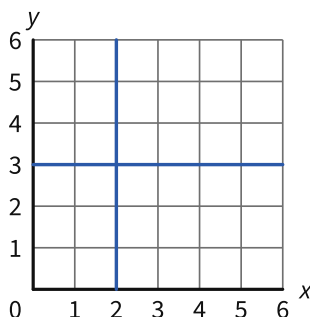
ANSWERS

Ruler | 30 minutes | Total marks: 19

Name

Class

1



On the grid, draw these two lines.

$$x = 2$$

$$y = 3$$

Vertical line through 2 (1) Horizontal line through 3 (1) [2 marks]

2

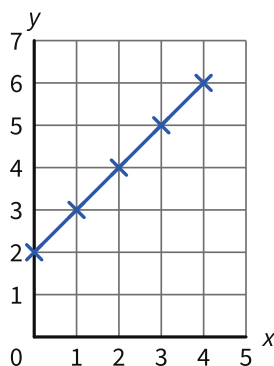
(a) Complete the table of values for $y = x + 2$

x	0	1	2	3	4
y	2	3	4	5	6 (1)(1)

[2 marks]

(b) Use your table to draw the graph.

Draw the graph of $y = x + 2$ on the grid.



Points plotted (1) Straight line through them (1) [2 marks]

3

$$y = 2x + 3$$

(a) Write down the gradient of the line.

Answer 2 (1)

[1 mark]

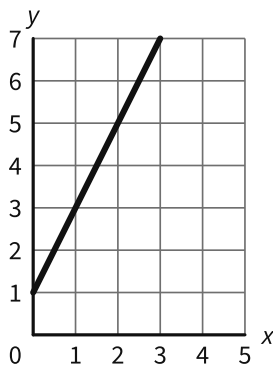
(b) Write down where the line crosses the y-axis.

Answer 3 (1)

[1 mark]

4

The grid shows a straight line.



(a) Each time the line goes 1 square across, how many squares does it go up?

Answer 2 (1)

[1 mark]

(b) Write down where the line crosses the y-axis.

Answer 1 (1)

[1 mark]

(c) Complete the equation of the line.

$$y = \boxed{2}x + \boxed{1} \quad (1)$$

[1 mark]

5

Which one of these lines is parallel to $y = 3x + 1$?

$$y = x + 3$$

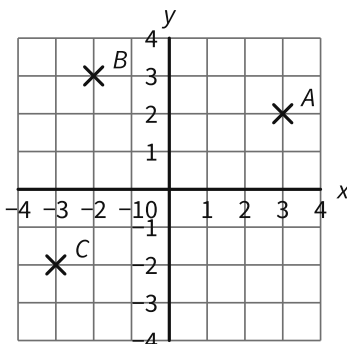
$$y = 3x - 2$$

$$y = 2x + 1$$

Answer $y = 3x - 2$ (1)

[1 mark]

6



Write down the coordinates of each point.

A (3, 2) (1)

[1 mark]

B (-2, 3) (1)

[1 mark]

C (-3, -2) (1)

[1 mark]

7

P is the point (2, 4) and Q is the point (6, 8)

Work out the coordinates of the midpoint of PQ .

halfway between 2 and 6 is 4 (1)

Answer (4, 6) (1)

[2 marks]

8

Does the point (2, 7) lie on the line $y = 3x + 1$?

You **must** show your working.

$3 \times 2 + 1 = 7$ (1) so yes (1)

[2 marks]

Question	Topic	RAG
1	I can draw lines such as $x = 2$ and $y = 3$	
2	I can draw a straight line graph from a table	
3	I can read the gradient and intercept from an equation	
4	I can find the gradient and equation of a line on a grid	
5	I can recognise parallel lines	
6	I can read coordinates in all four quadrants	
7	I can find the midpoint of a line	
8	I can check whether a point lies on a line	