

Plotting Straight-Line Graphs

For AQA GCSE Mathematics (8300) • Foundation tier

Name _____

Total marks: **24**

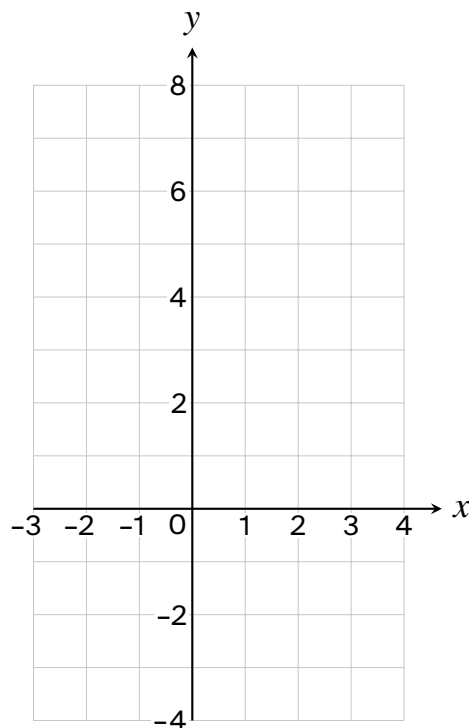
Answer **all** questions in the spaces provided. Show your working: marks are given for correct method.

- 1 (a) Complete the table of values for $y = 2x + 1$

x	-1	0	1	2	3
y	-1		3		

[2 marks]

- (b) On the grid, draw the graph of $y = 2x + 1$ for values of x from -1 to 3



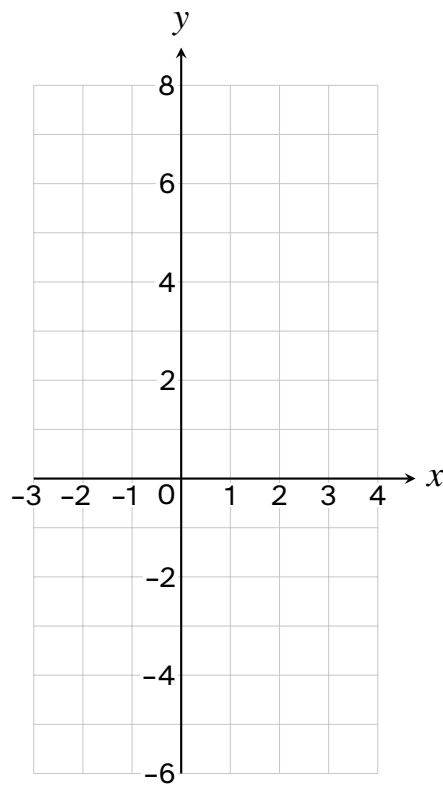
[2 marks]

- 2 (a) Complete the table of values for $y = 3x - 2$

x	-1	0	1	2	3
y		-2			7

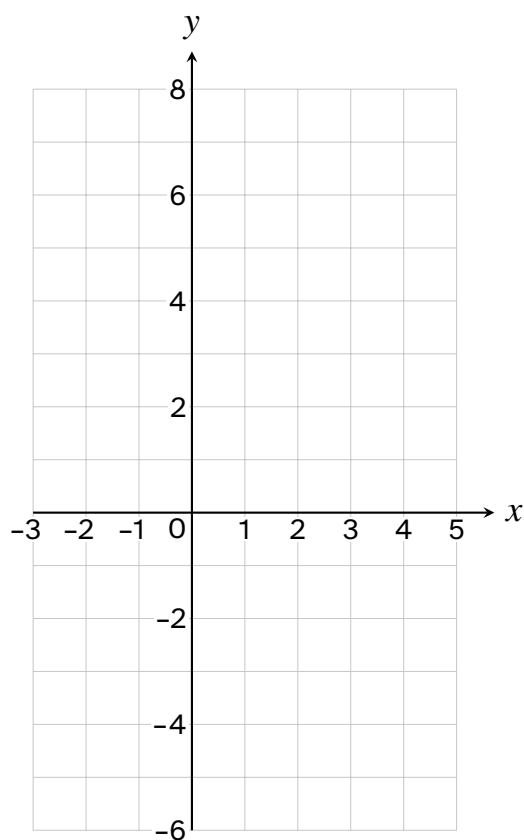
[2 marks]

- (b) Draw the graph of $y = 3x - 2$ for values of x from -1 to 3



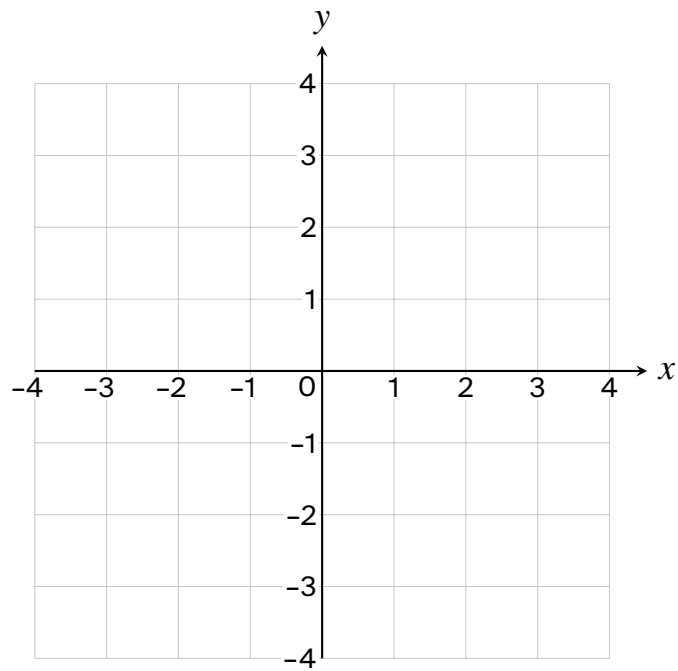
[2 marks]

- 3** On the grid, draw the graph of $y = 3 - 2x$ for values of x from -2 to 4



[3 marks]

4 Here is a grid.



(a) Draw the line $y = 3$ on the grid.

[1 mark]

(b) Draw the line $x = -2$ on the grid.

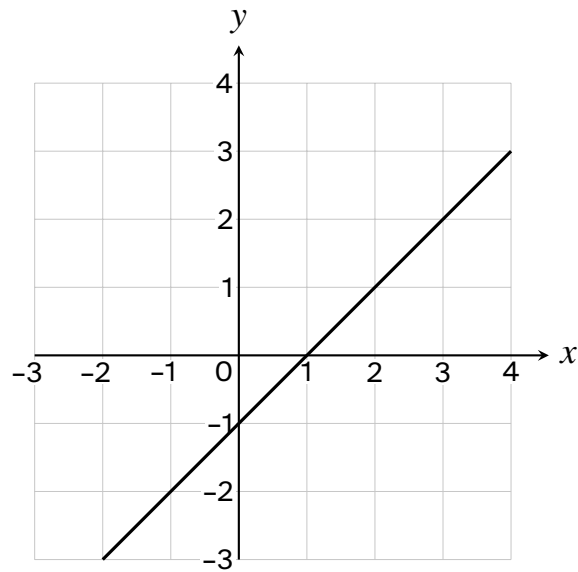
[1 mark]

(c) Write down the coordinates of the point where the two lines cross.

[1 mark]

Answer (_____ , _____)

- 5 Circle the equation of this line.



[1 mark]

$y = x$

$y = x + 1$

$y = x - 1$

$y = -x$

- 6 Kofi wants to draw the graph of $y = 2x + 1$
He makes this table of values.

x	0	1	2	3
y	1	3	6	7

Which y -value in Kofi's table is wrong?
Give the correct value.

[1 mark]

Answer _____

- 7** Does the point (4,11) lie on the line $y = 3x - 1$?
Tick a box.
Show how you decide.

[1 mark]

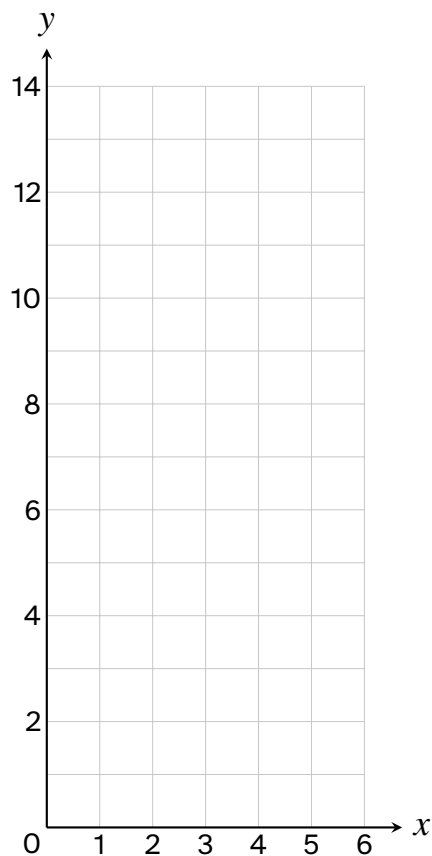
☐ Yes

☐ No

- 8** Here is a table of values for the equation $y = 2x + 3$

x	1	2	3	4
y	5	7	9	11

- (a) Draw the graph of $y = 2x + 3$ for values of x from 1 to 4



[2 marks]

- (b) Work out the value of y when $x = 2.5$

[1 mark]

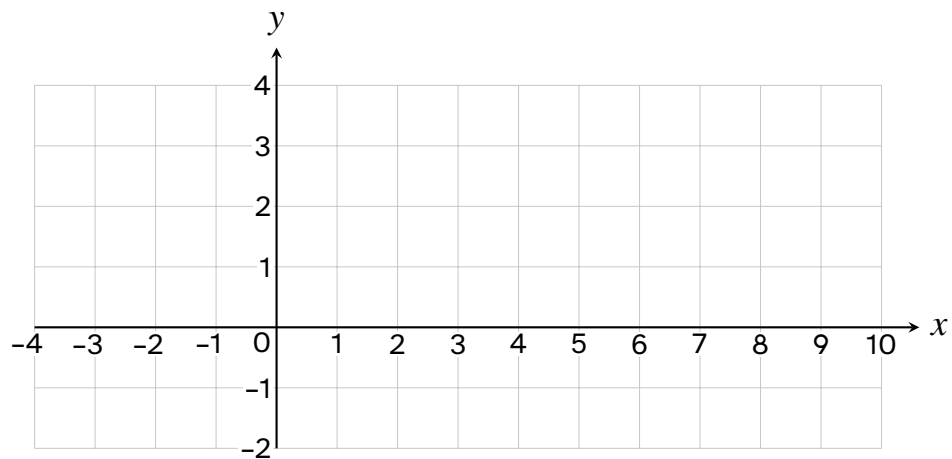
$y =$ _____

- 9 (a) Complete the table of values for $x + 3y = 6$

x	-3	0	3	6	9
y		2		0	

[2 marks]

- (b) On the grid, draw the line $x + 3y = 6$ for values of x from -3 to 9



[2 marks]