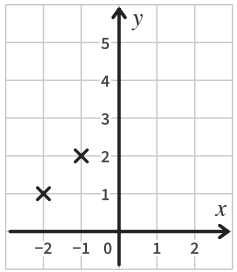
Plotting straight-line graphs

1

Plot the points from the table for $y = x + 3$. Draw the line with a ruler.

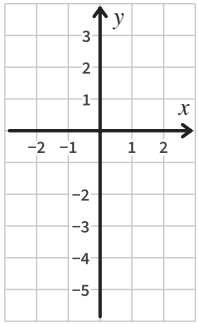
x	−2	−1	0	1	2
y	1	2	3	4	5



2

Complete the table for $y = 2x - 1$.
Draw the graph.

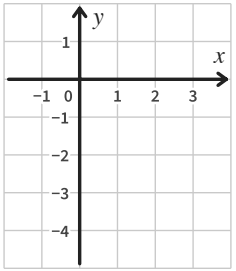
x	−2	−1	0	1	2
y			−1	1	3



3

Complete the table for $y = x - 3$.
Draw the graph.

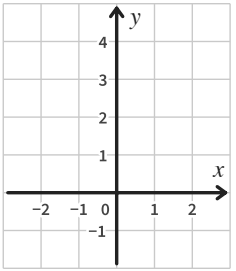
x	−1	0	1	2	3
y					



4 *Notice the change!*

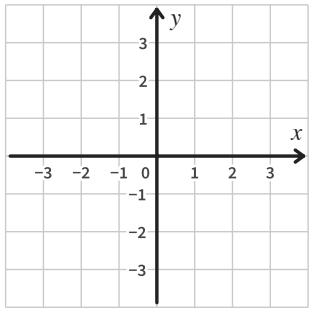
Complete the table for $y = 2 - x$.
Draw the graph.

x	−2	−1	0	1	2
y					



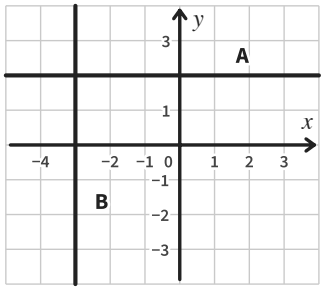
5

Draw the lines $y = -1$ and $x = 2$ on the grid. Label each line.



6

Write down the equation of line A and the equation of line B.



Line A _____

Line B _____

7

Maya makes this table for $y = 3x + 2$.
One value is wrong. Explain her mistake.
What should it be?

x	−1	0	1	2	3
y	5	2	5	8	11

_____

_____

At $x = -1$, $y =$ _____

8

Is the point **(5, 13)** on the line $y = 3x - 2$? Show how you know.

$x = 5$: _____

_____

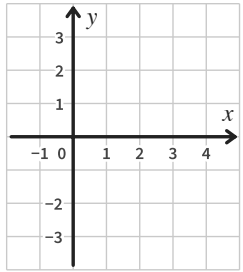
On the line? _____

Plotting straight-line graphs *further practice*

9

Make a table of values for $y = 2x - 3$ for x from 0 to 3. Draw the graph.

x	0	1	2	3
y				

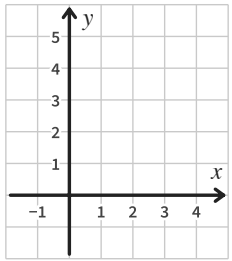


Graph

10

Make a table of values for $y = 5 - 2x$ for x from 0 to 3. Draw the graph.

x	0	1	2	3
y				



Graph

11

Which two of these lines are horizontal?

$y = 6$ $x = 6$ $y = 6x$ $y = -1$

Answer

12

The lines $x = 3$ and $y = -2$ cross. Write down the coordinates of the point where they cross.

Answer

13

Which of these points is not on the line $y = x + 4$?

A (1, 5) B (−2, 2)

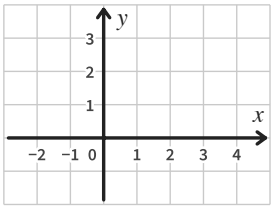
C (3, 8) D (−6, −2)

Answer

14

Complete the table for $y = \frac{1}{2}x + 1$. Draw the graph.

x	−2	0	2	4
y				



Graph

15

Hiring a bike costs £4, plus £3 for each hour. The cost in pounds for h hours is $C = 3h + 4$. Complete the table. How much does it cost to hire the bike for 6 hours?

h	0	1	2	3	4
C					

Cost

16

The point $(a, 7)$ is on the line $y = 3x - 5$. Find the value of a.

Answer