Straight Line Graphs

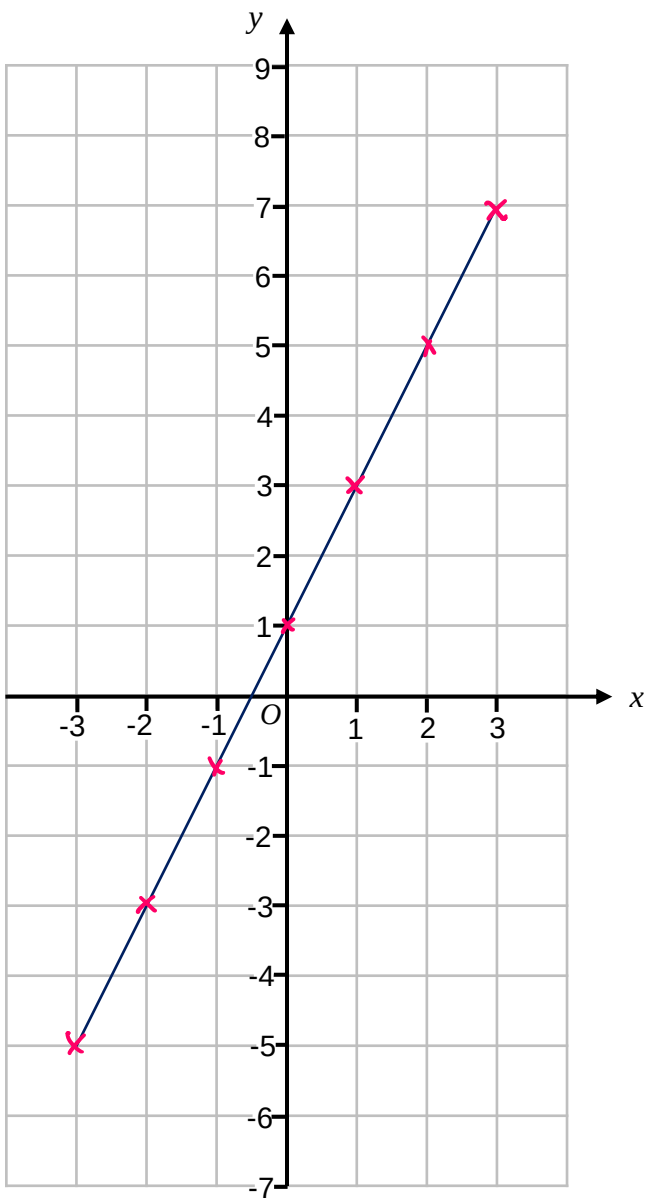
SCAN ME

REVISE THIS TOPIC

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

[3 marks]

x	-3	-2	-1	0	1	2	3
y	-5	-3	-1	1	3	5	7

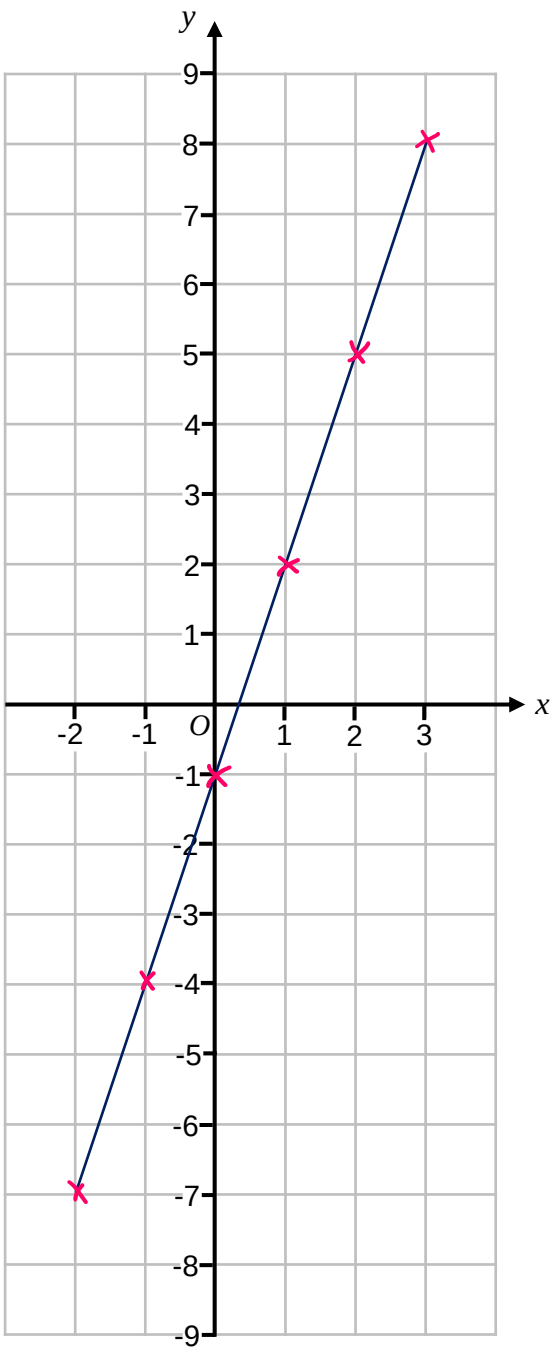


3

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

[3 marks]

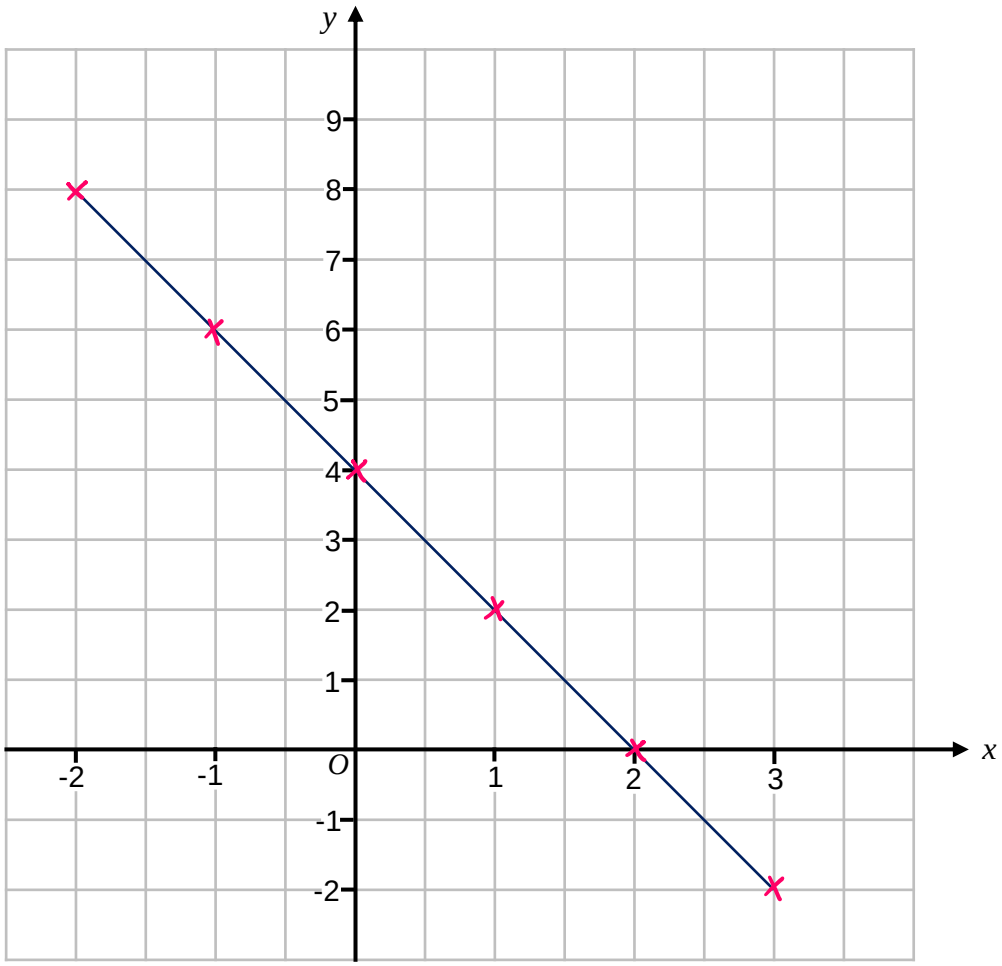
x	-2	-1	0	1	2	3
y	-7	-4	-1	2	5	8



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

[3 marks]

x	-2	-1	0	1	2	3
y	8	6	4	2	0	-2

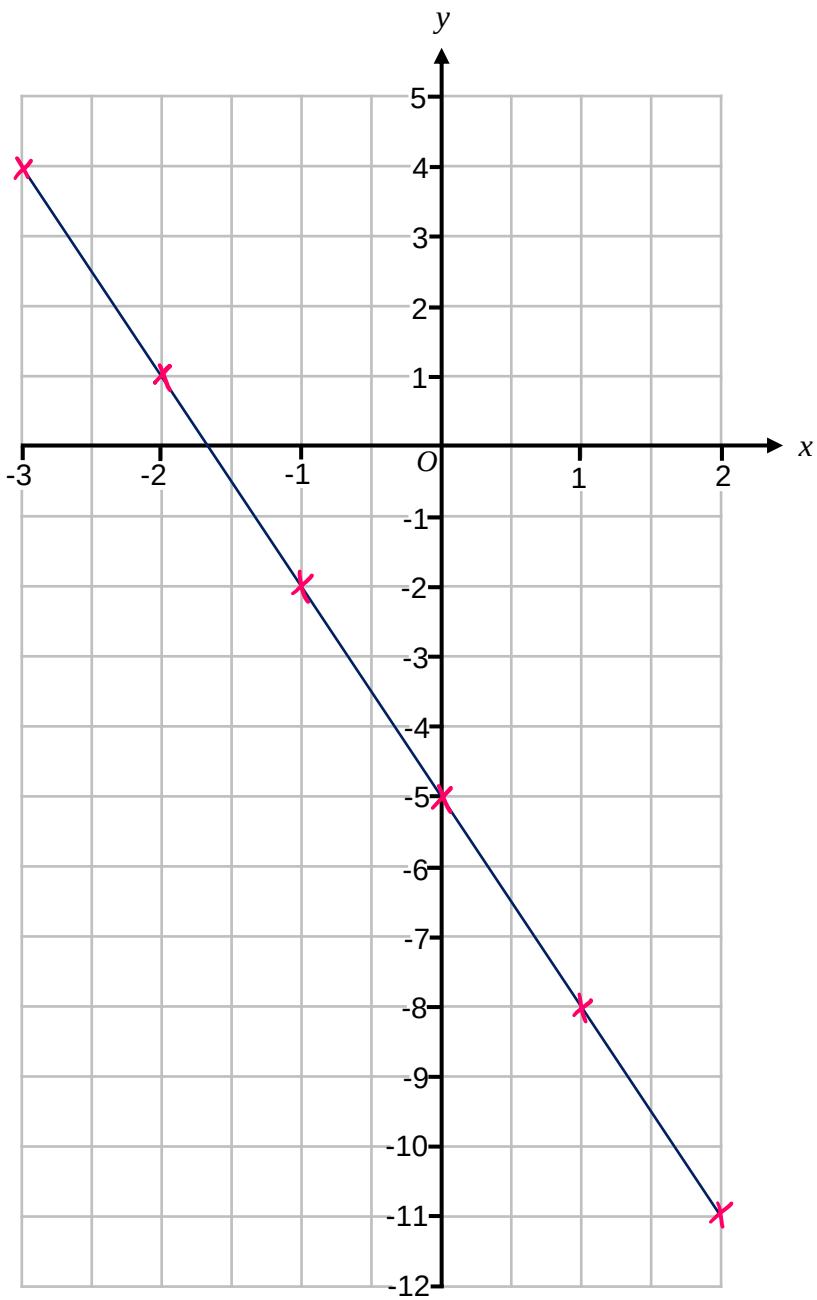


6

4 On the grid, draw the graph of $y = -3x - 5$ for values of x from to -3 to 2

[3 marks]

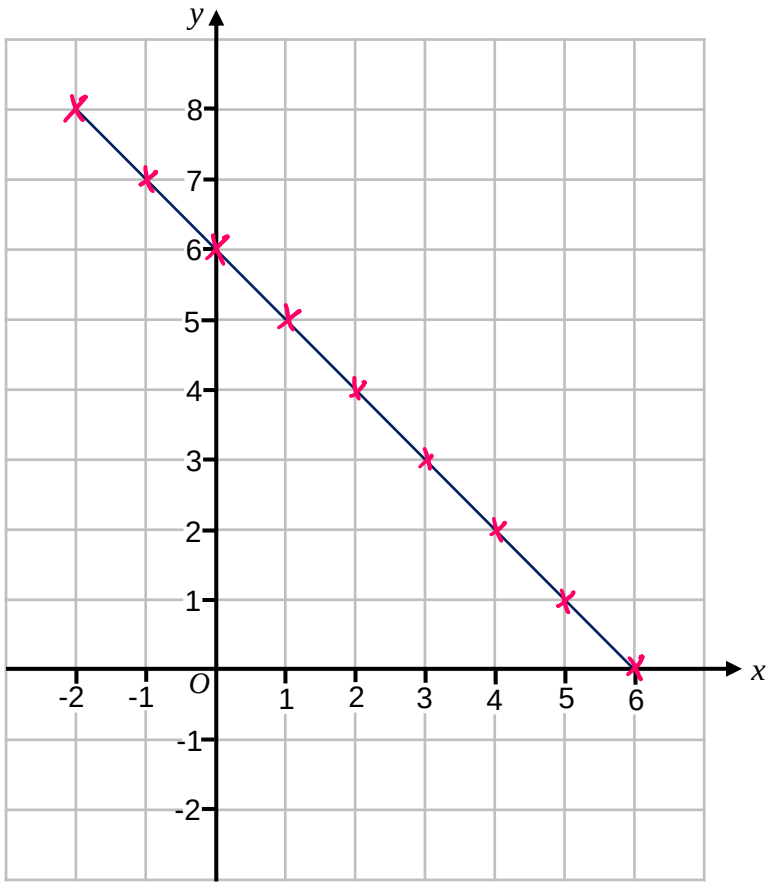
x	-3	-2	-1	0	1	2
y	4	1	-2	-5	-8	-11



5 On the grid, draw the graph of $x + y = 6$ for values of x from to -2 to 6

[3 marks]

x	-2	-1	0	1	2	3	4	5	6
y	8	7	6	5	4	3	2	1	0

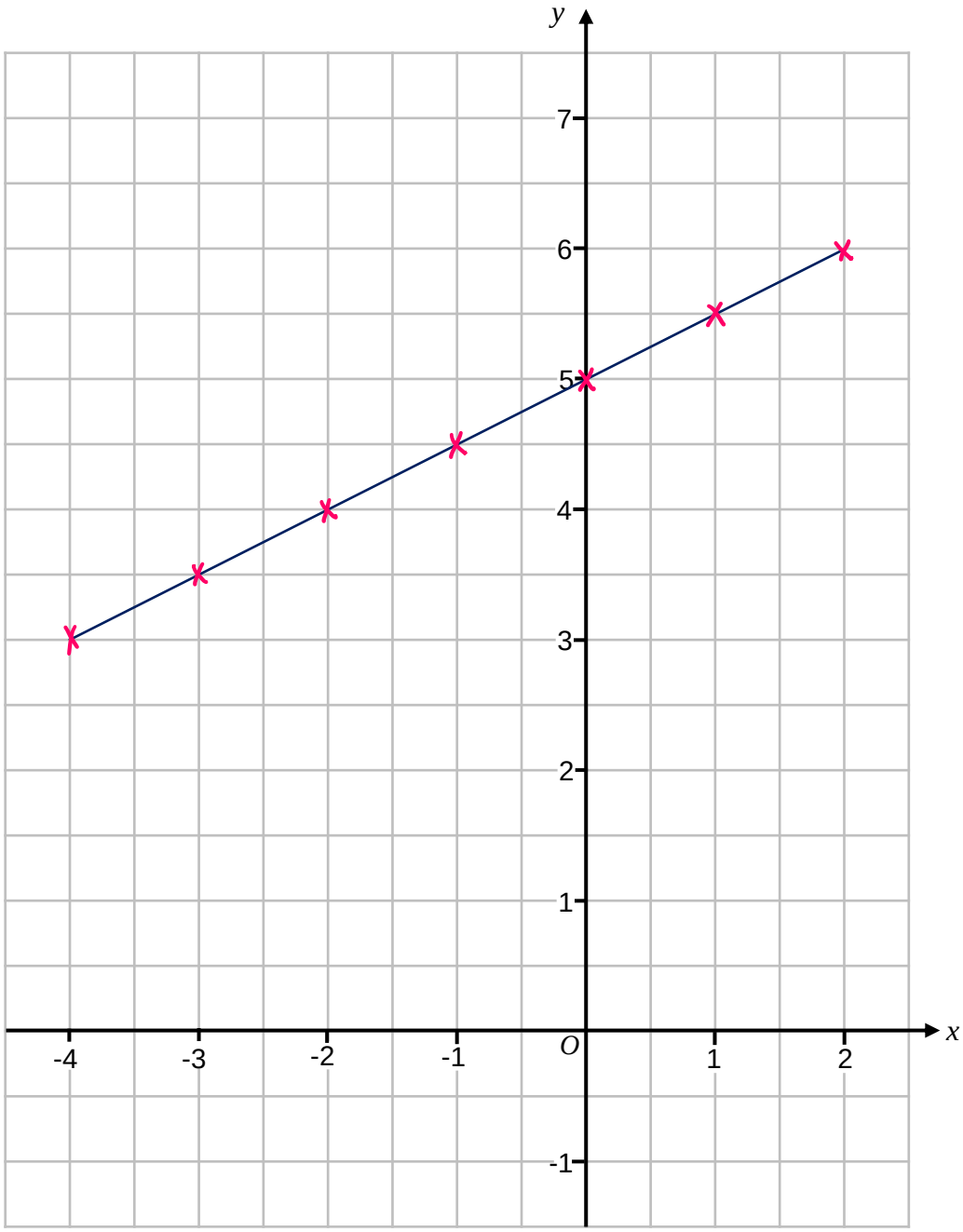


6

6 On the grid, draw the graph of $y = \frac{1}{2}x + 5$ for values of x from to -4 to 2

[3 marks]

x	-4	-3	-2	-1	0	1	2
y	3	3·5	4	4·5	5	5·5	6

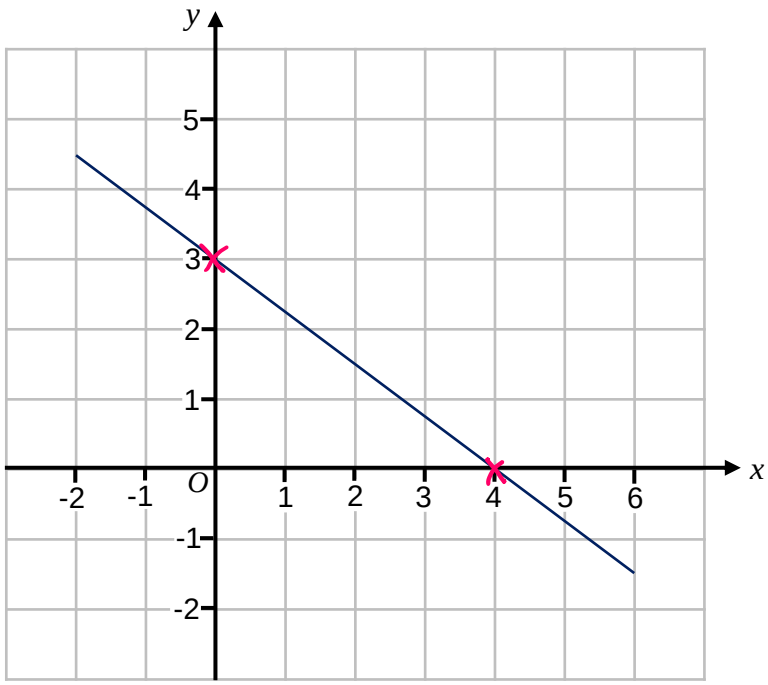


7 On the grid, draw the graph of $3x + 4y = 12$ for values of x from to -2 to 6

[3 marks]

$3x = 12$
$x = 4$
$(4, 0)$

$4y = 12$
$y = 3$
$(0, 3)$

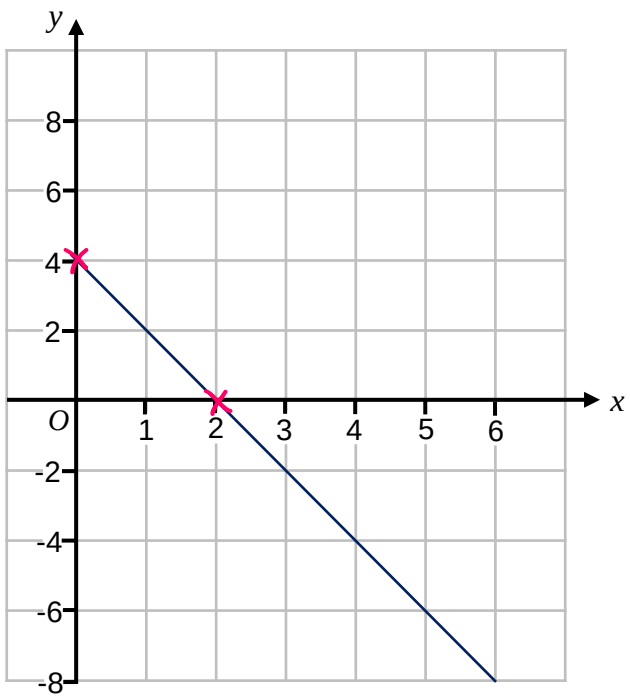


8 On the grid, draw the graph of $4x + 2y = 8$ for values of x from to 0 to 6

[3 marks]

$4x = 8$
$x = 2$
$(2, 0)$

$2y = 8$
$y = 4$
$(0, 4)$



9 On the grid, draw the graph of $x + 2y = 5$ for values of x from to -2 to 6

[3 marks]

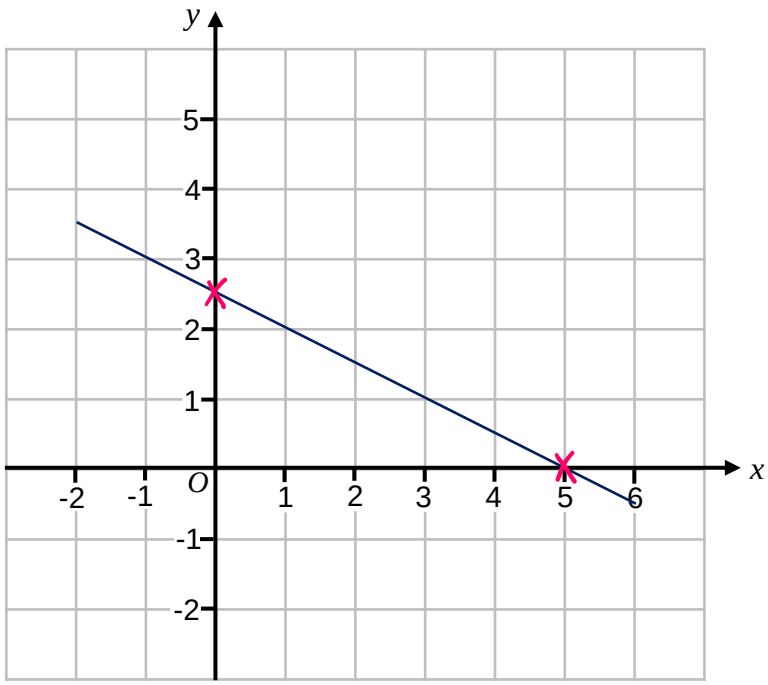
$x = 5$

$(5, 0)$

$2y = 5$

$y = 2.5$

$(0, 2.5)$



10 On the grid, draw the graph of $2x - y = 4$ for values of x from to 0 to 6

[3 marks]

$2x = 4$

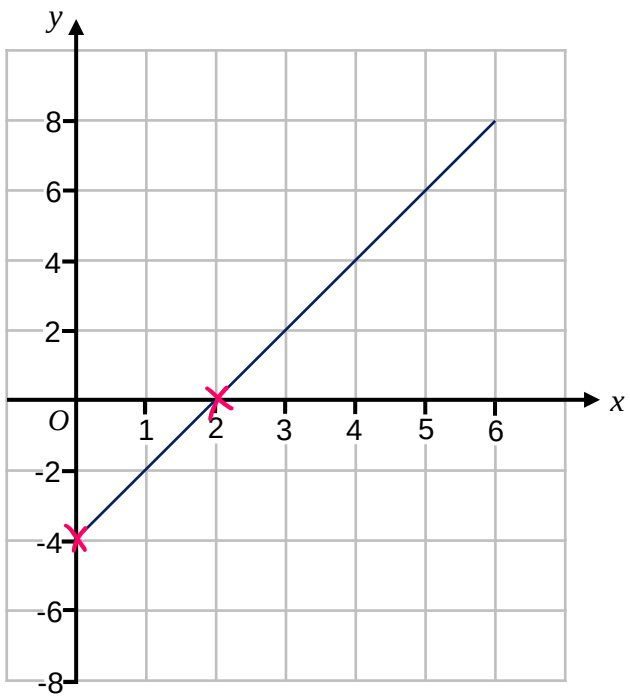
$x = 2$

$(2, 0)$

$-y = 4$

$y = -4$

$(0, -4)$

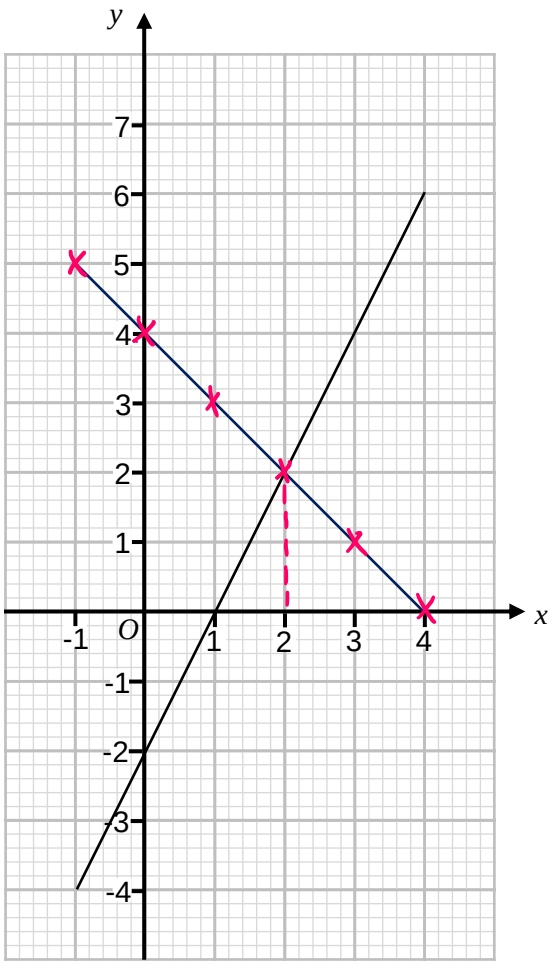


11 The graph of $y = 2x - 2$ for x values from -1 to 4 is shown on the grid.

11 (a) On the grid, draw the graph of $y = 4 - x$ for x values from -1 to 4

[3 marks]

x	-1	0	1	2	3	4
y	5	4	3	2	1	0



11 (b) Use your graph to solve $4 - x = 2x - 2$

[1 mark]

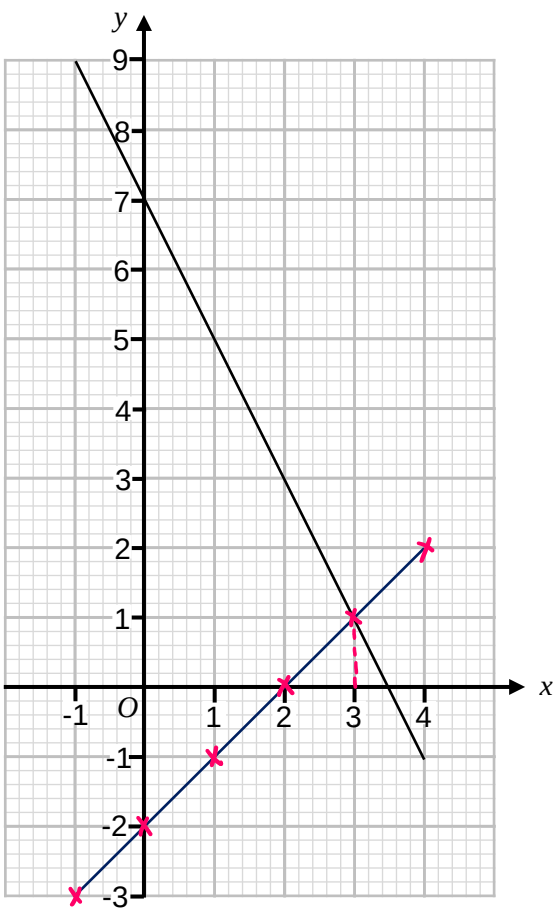
$x =$ 2

10

12 The graph of $y = 7 - 2x$ for x values from -1 to 4 is shown on the grid.

12 (a) On the grid, draw the graph of $y = x - 2$ for x values from -1 to 4 **[3 marks]**

x	-1	0	1	2	3	4
y	-3	-2	-1	0	1	2



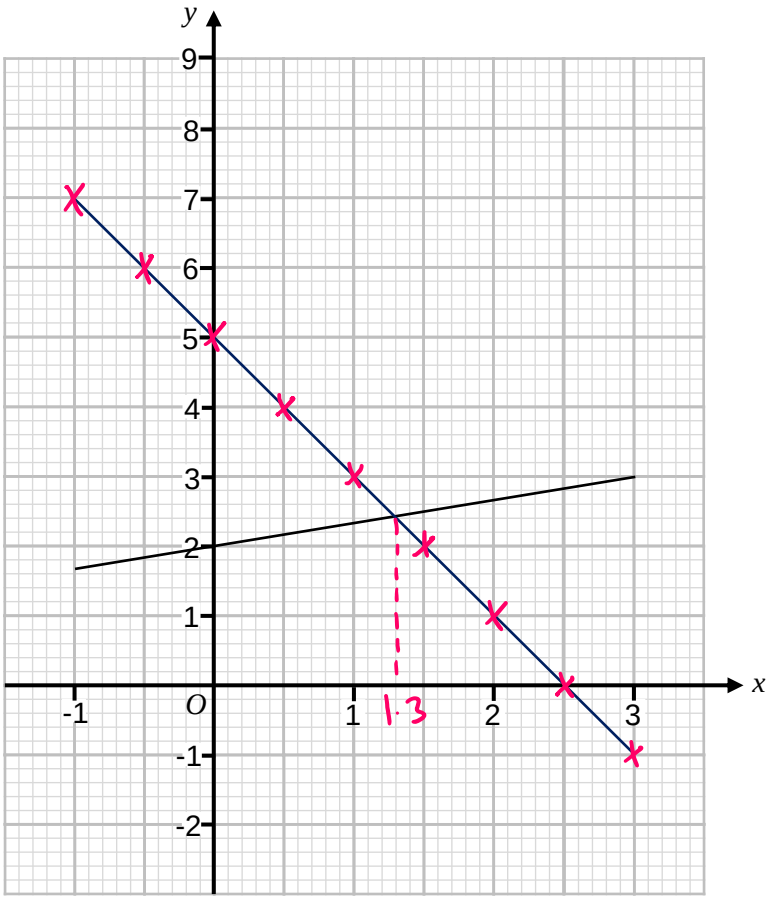
12 (b) Use your graph to solve $x - 2 = 7 - 2x$ **[1 mark]**

$x =$ 3

13 The graph of $y = \frac{1}{3}x + 2$ for x values from -1 to 3 is shown on the grid.

13 (a) On the grid, draw the graph of $y = 5 - 2x$ for x values from -1 to 3 **[3 marks]**

x	-1	0	1	2	3
y	7	5	3	1	-1



13 (b) Use your graph to find an approximate solution to $\frac{1}{3}x + 2 = 5 - 2x$ **[1 mark]**

Give your answer as a decimal.

$x =$ 1·3

8