



# Straight Line Graphs

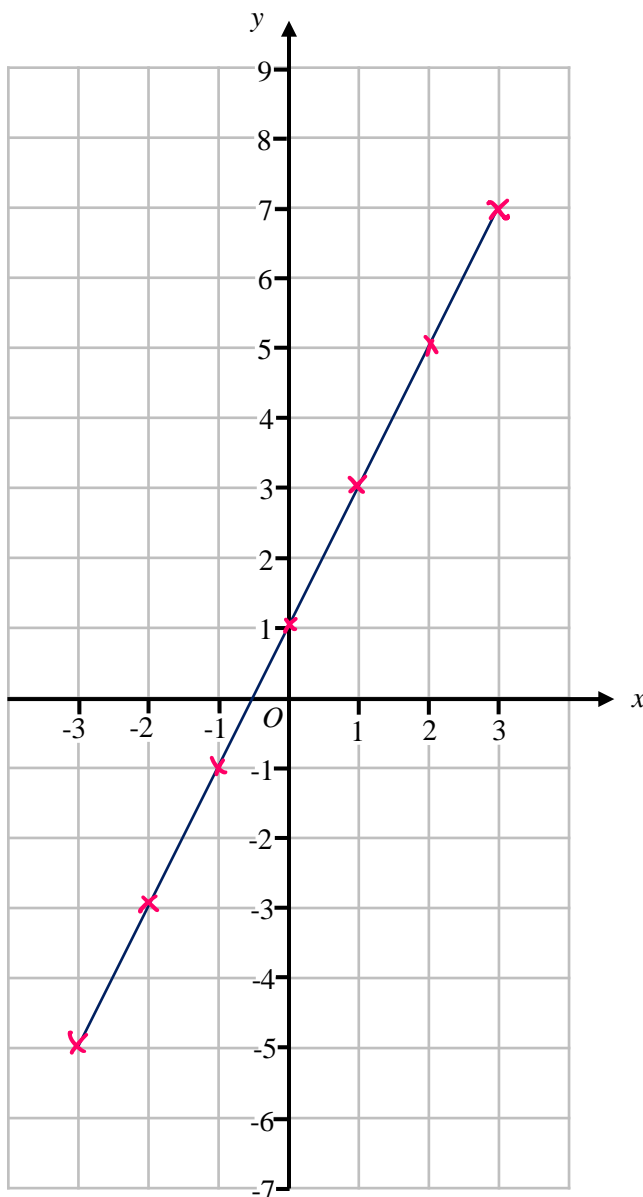


REVISE THIS TOPIC



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

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



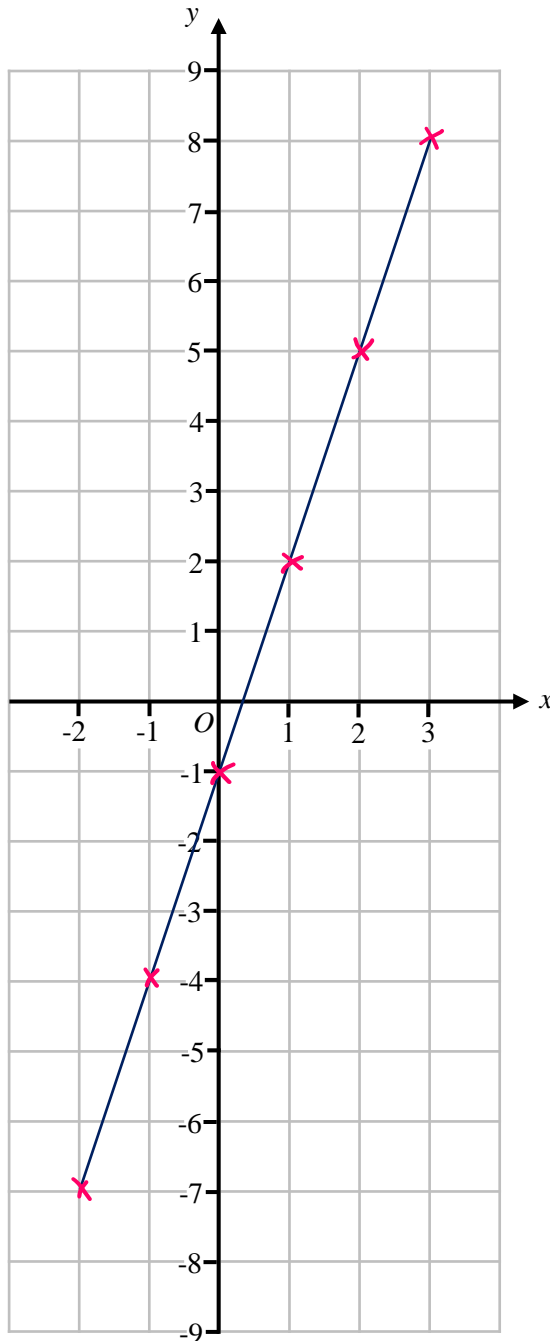
(Total for Question 1 is 3 marks)



1

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

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

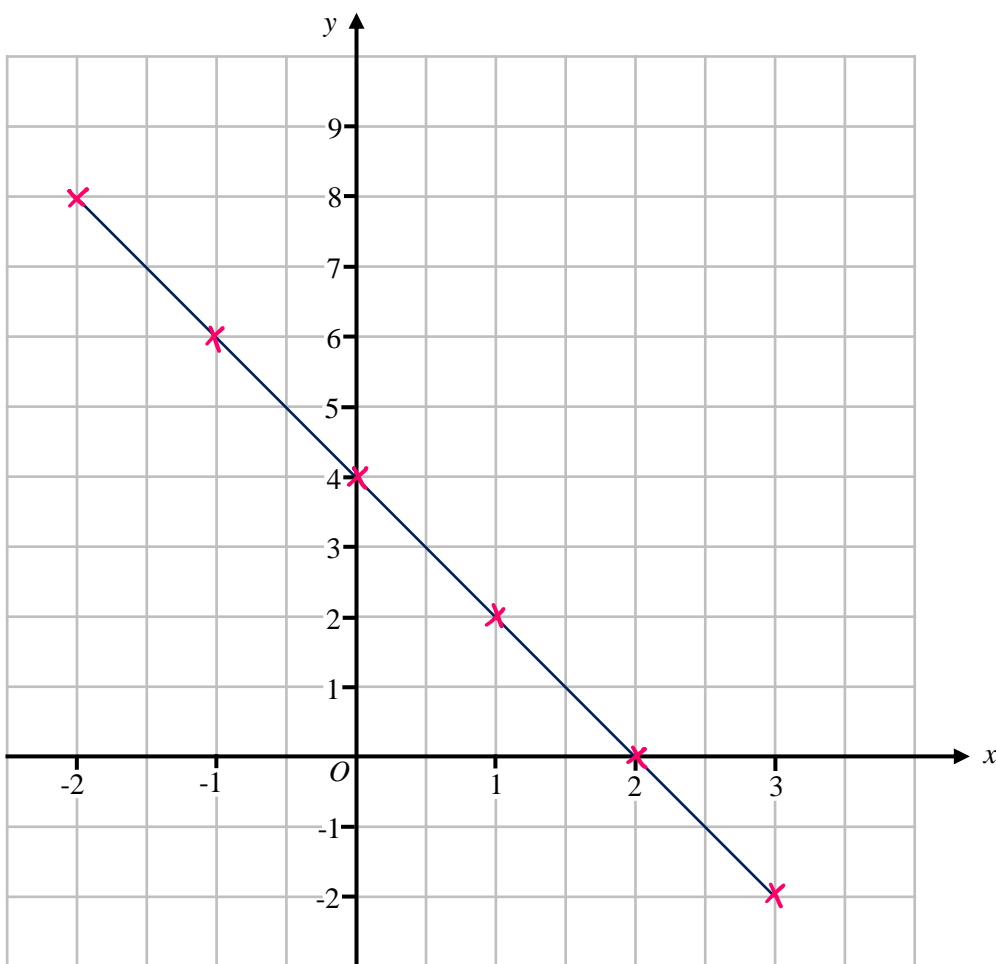


(Total for Question 2 is 3 marks)



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

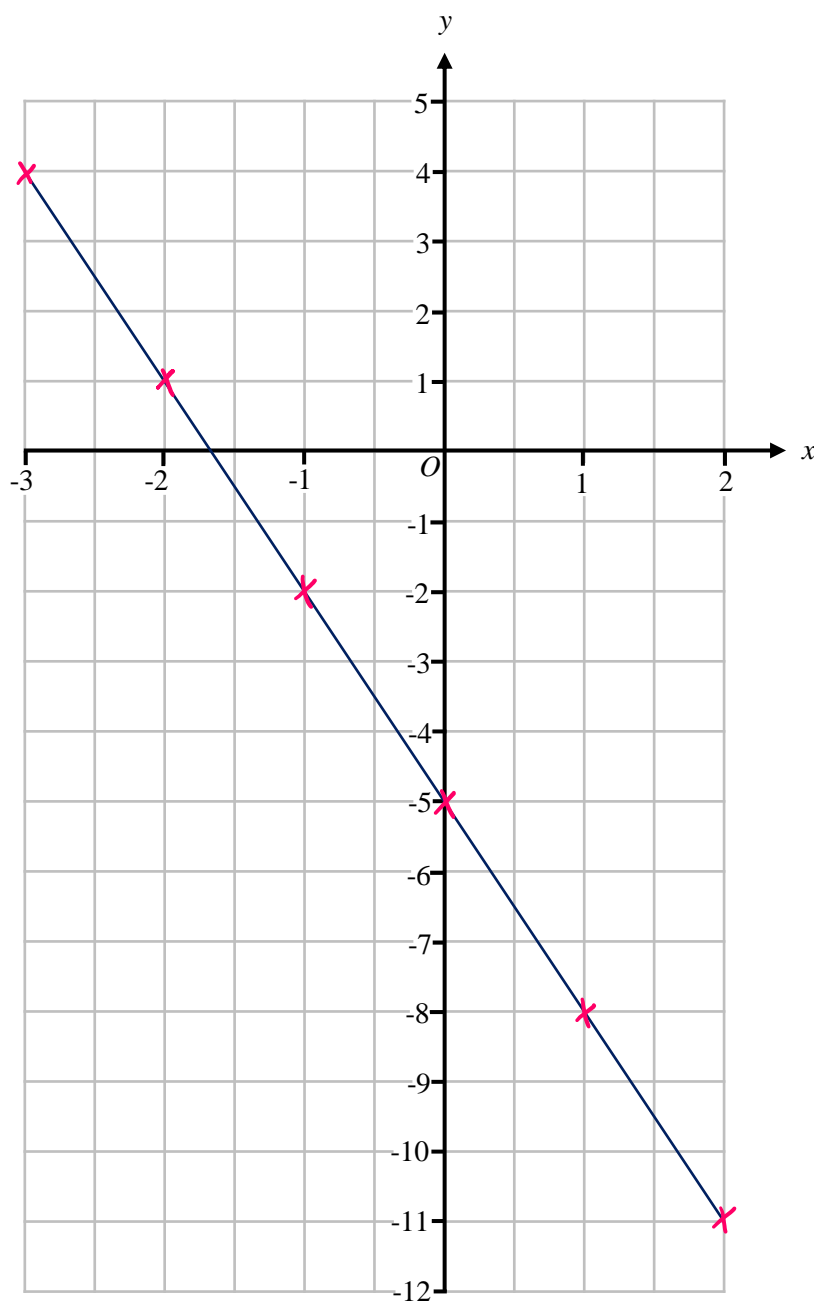
$x$	-2	-1	0	1	2	3
$y$	8	6	4	2	0	-2



(Total for Question 3 is 3 marks)

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

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

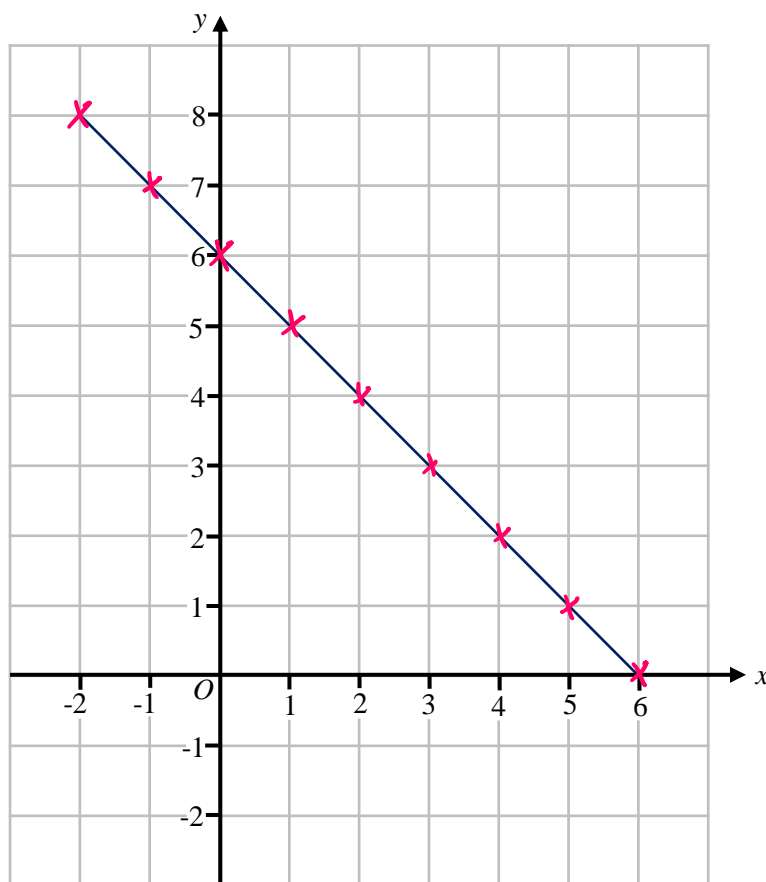


(Total for Question 4 is 3 marks)



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

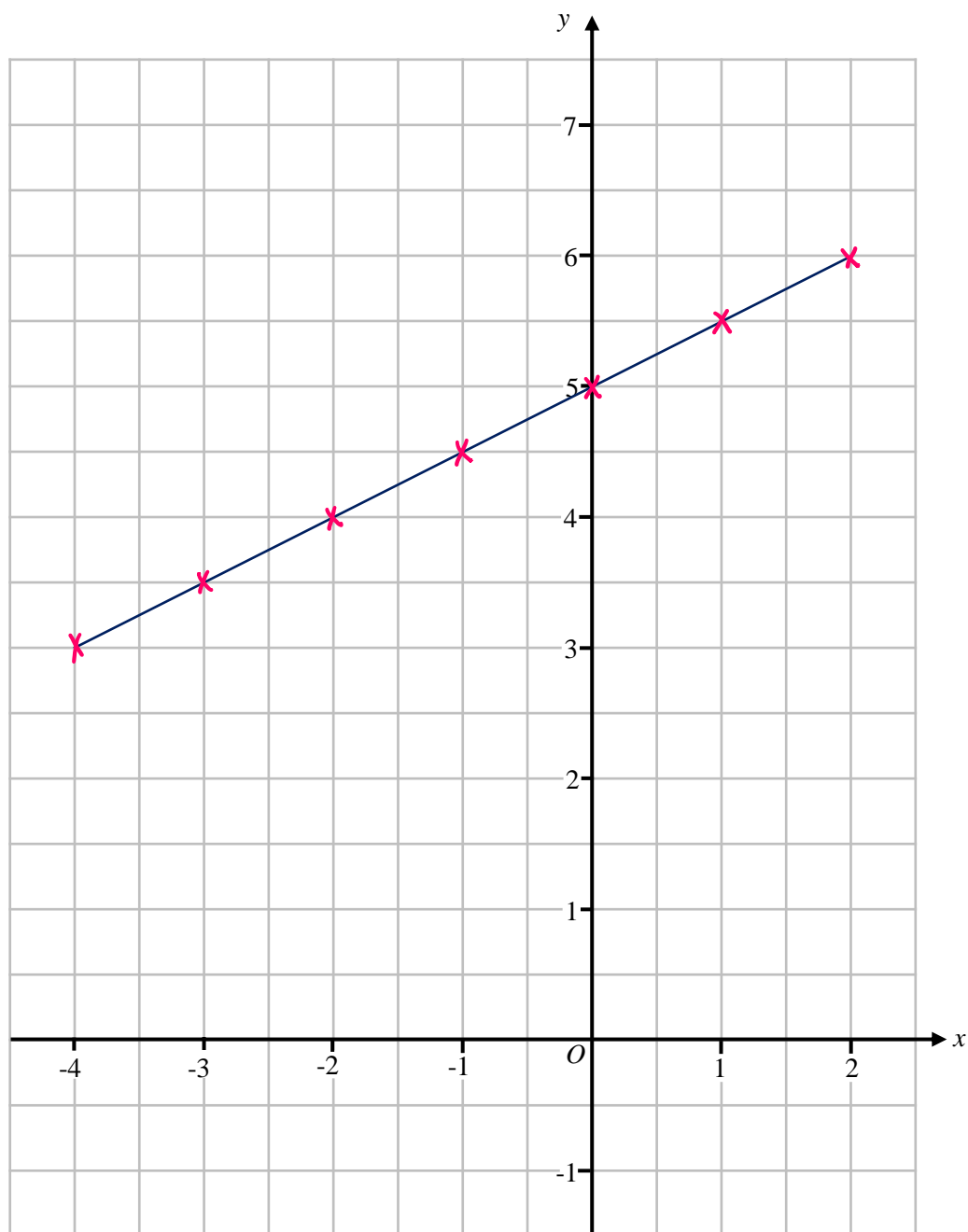
$x$	-2	-1	0	1	2	3	4	5	6
$y$	8	7	6	5	4	3	2	1	0



(Total for Question 5 is 3 marks)

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

$x$	-4	-3	-2	-1	0	1	2
$y$	3	3.5	4	4.5	5	5.5	6



(Total for Question 6 is 3 marks)



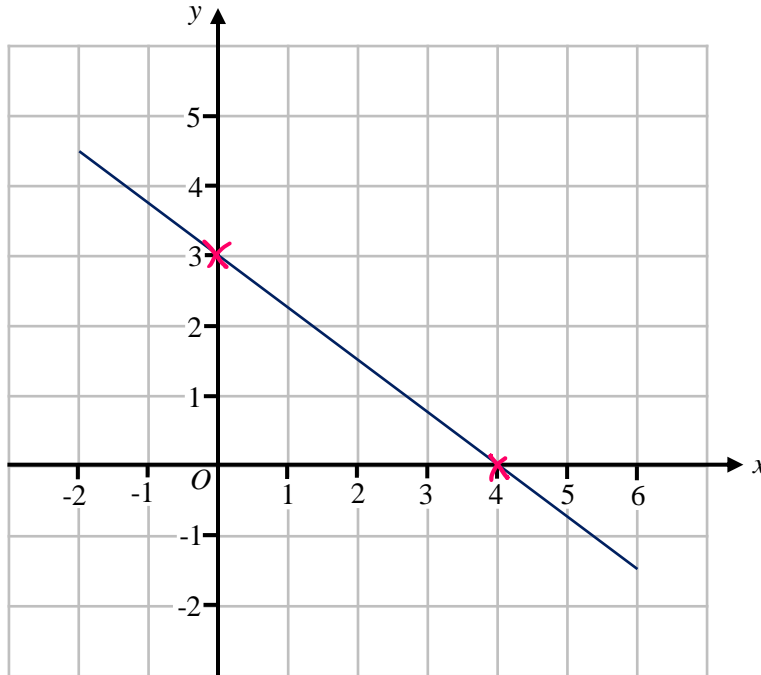
7 On the grid, draw the graph of  $3x + 4y = 12$  for values of  $x$  from to -2 to 6

$3x = 12$   
 $x = 4$

$(4, 0)$

$4y = 12$   
 $y = 3$

$(0, 3)$



(Total for Question 7 is 3 marks)

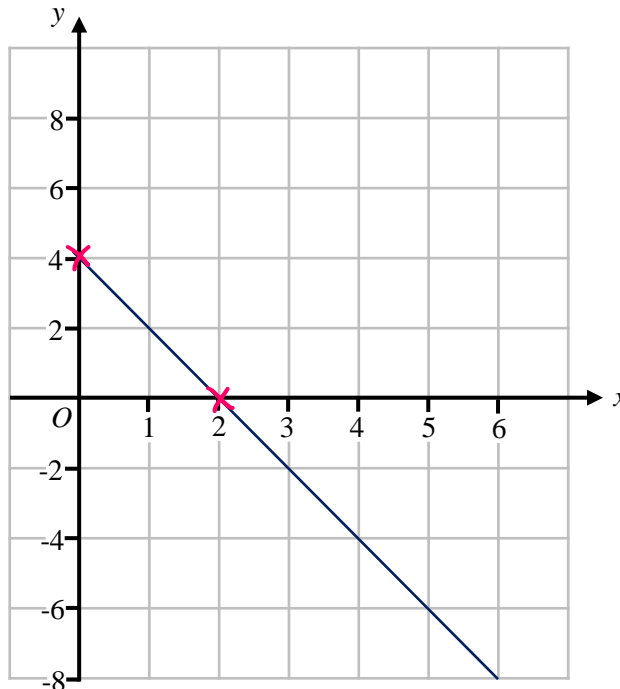
8 On the grid, draw the graph of  $4x + 2y = 8$  for values of  $x$  from to 0 to 6

$4x = 8$   
 $x = 2$

$(2, 0)$

$2y = 8$   
 $y = 4$

$(0, 4)$

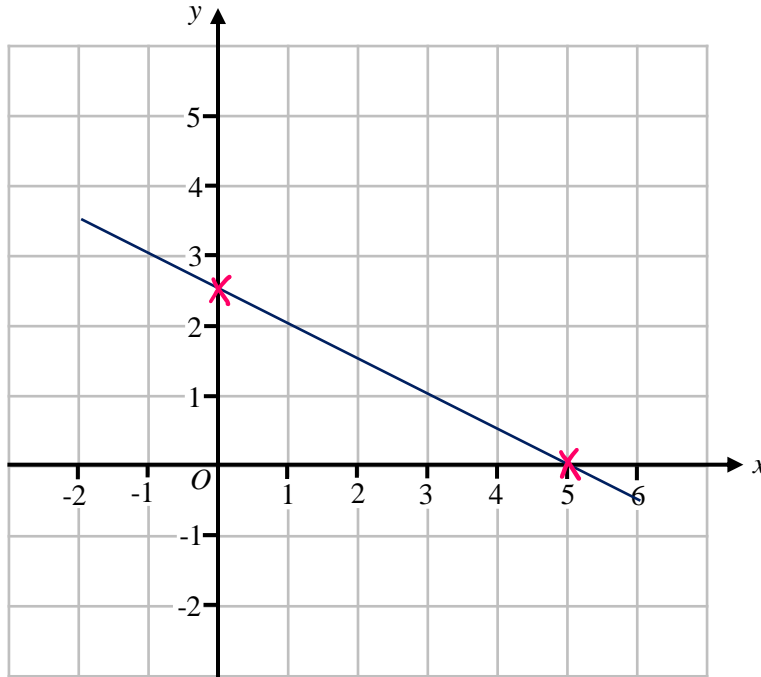


(Total for Question 8 is 3 marks)



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

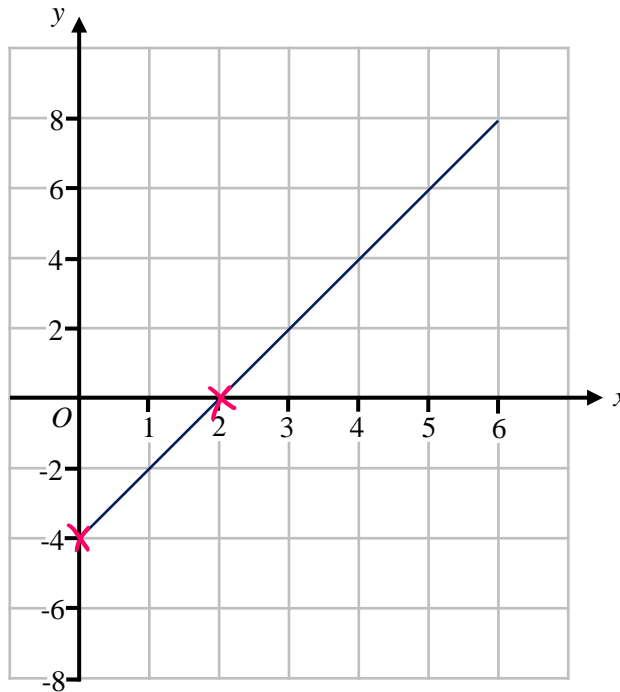
$x = 5$   
 $(5, 0)$   
 $2y = 5$   
 $y = 2.5$   
 $(0, 2.5)$



(Total for Question 7 is 3 marks)

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

$2x = 4$   
 $x = 2$   
 $(2, 0)$   
 $-y = 4$   
 $y = -4$   
 $(0, -4)$



(Total for Question 8 is 3 marks)

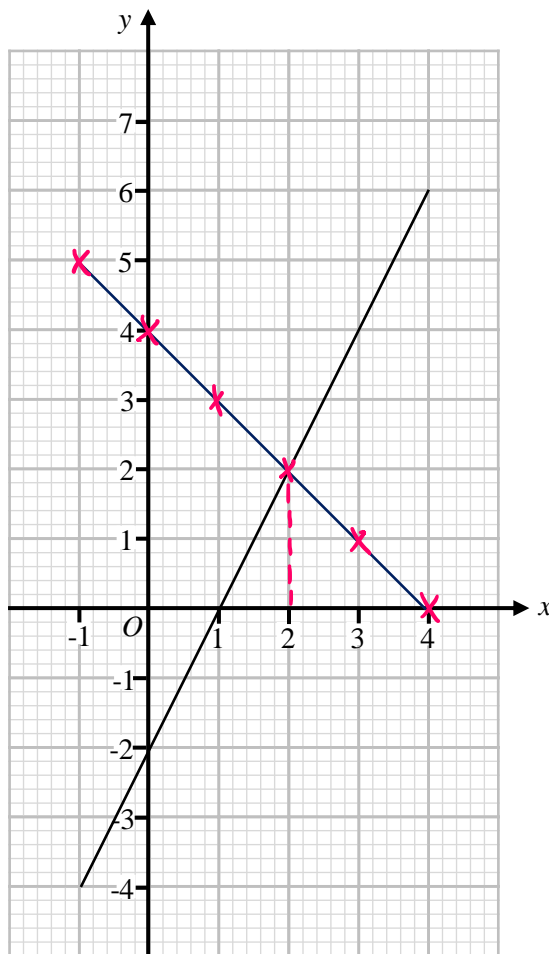




11 The graph of  $y = 2x - 2$  for  $x$  values from  $-1$  to  $4$  is shown on the grid.

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

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



(3)

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

..... 2 (1)

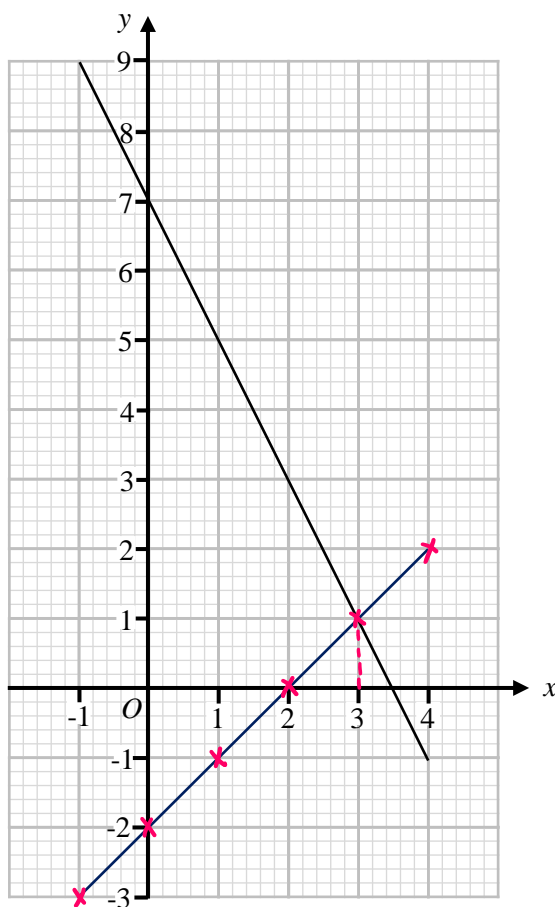
(Total for Question 11 is 4 marks)



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

(a) On the grid, draw the graph of  $y = x - 2$  for  $x$  values from  $-1$  to  $4$

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



(3)

(b) Use your graph to solve  $x - 2 = 7 - 2x$

3

(1)

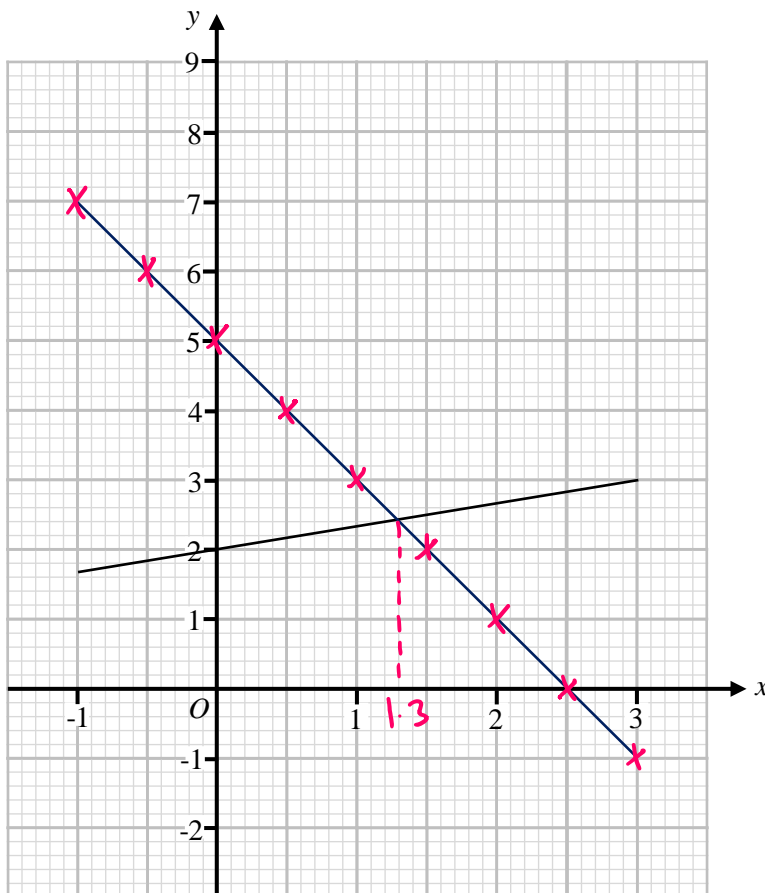
(Total for Question 12 is 4 marks)



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

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

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



(3)

(b) Use your graph to solve  $\frac{1}{3}x + 2 = 5 - 2x$

..... 1.3 (1)

(Total for Question 13 is 4 marks)

