



Straight Line Graphs

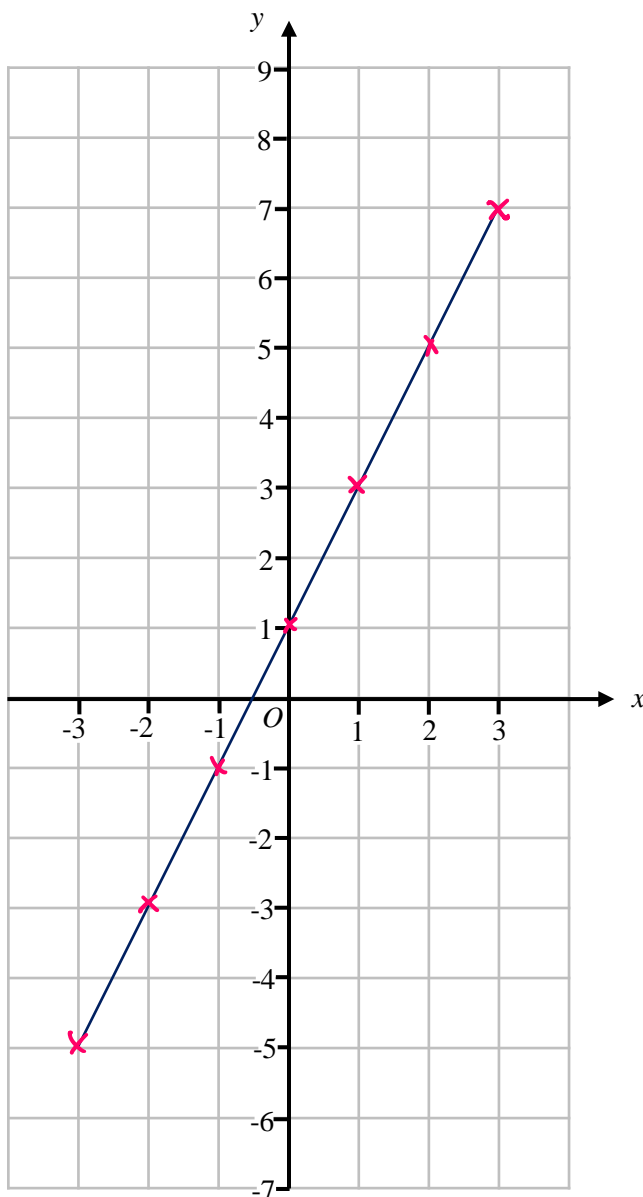


REVISE THIS TOPIC



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 |



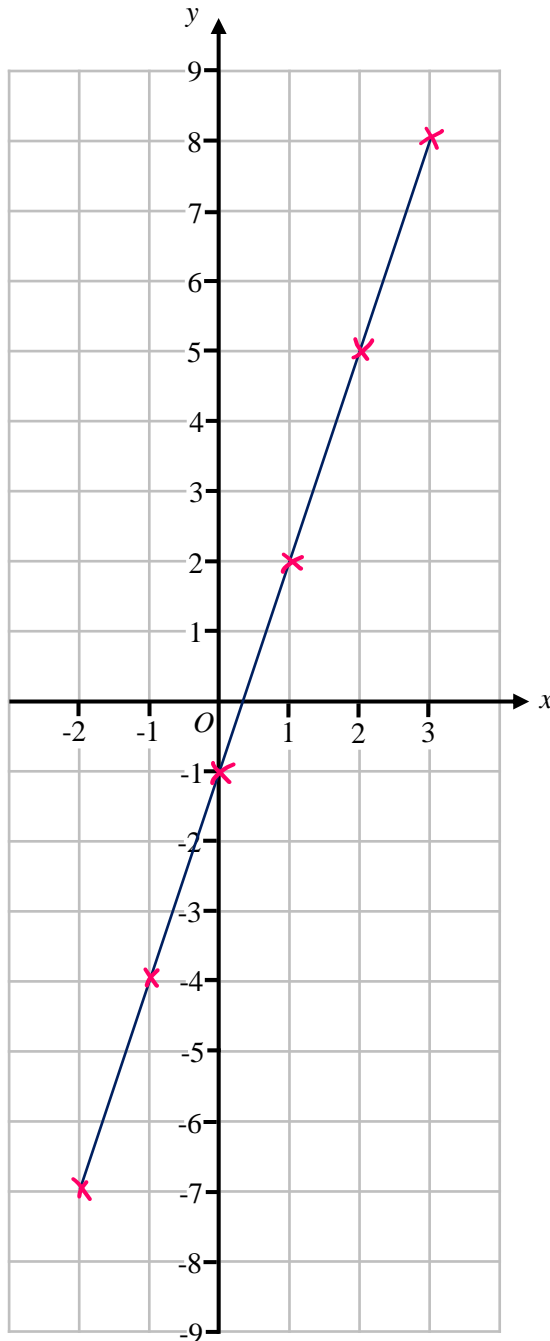
(Total for Question 1 is 3 marks)



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 |

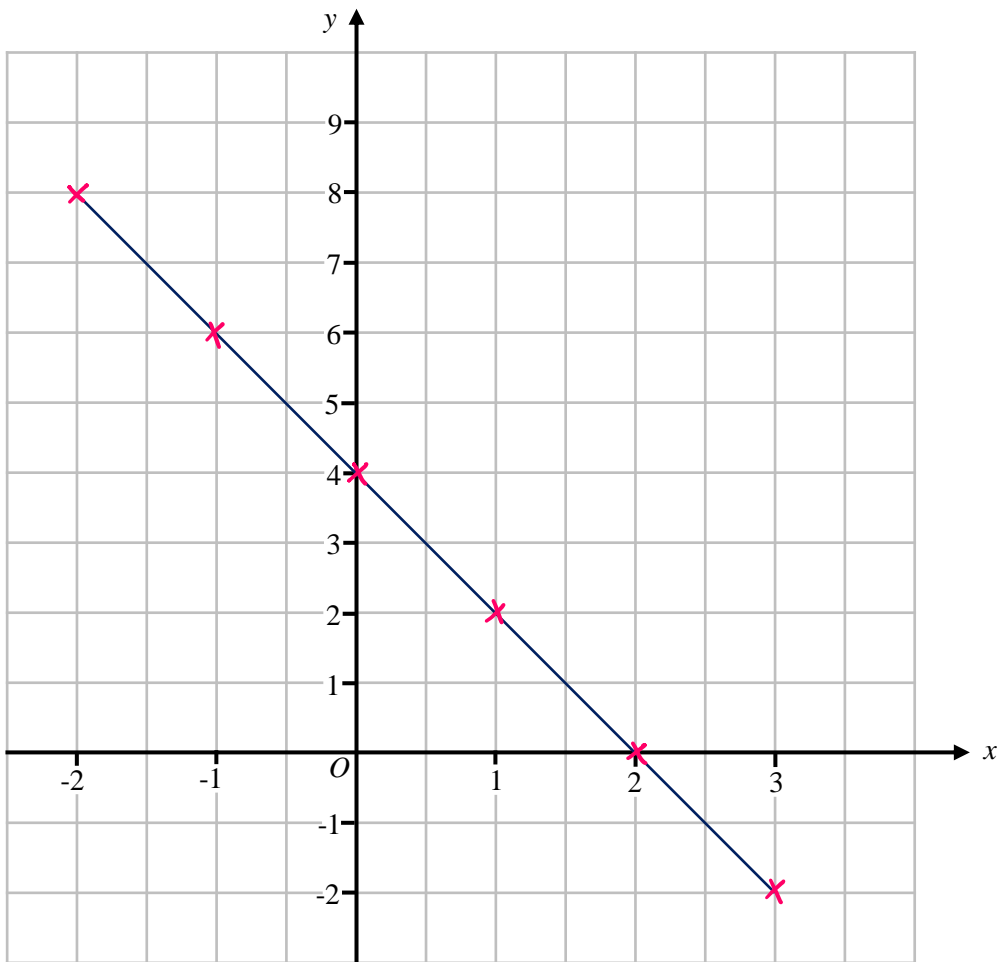


(Total for Question 2 is 3 marks)



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

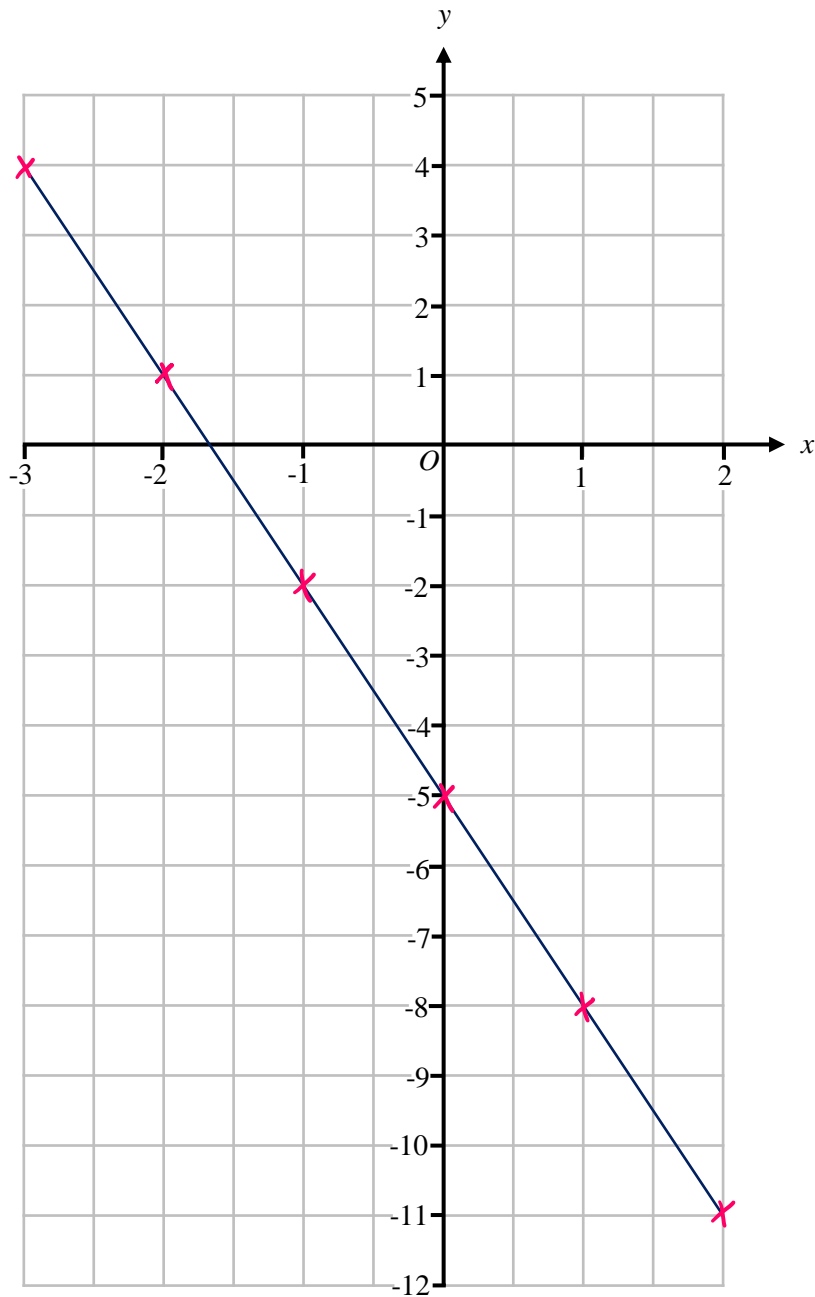
| | | | | | | |
|-----|----|----|---|---|---|----|
| x | -2 | -1 | 0 | 1 | 2 | 3 |
| y | 8 | 6 | 4 | 2 | 0 | -2 |



(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 |

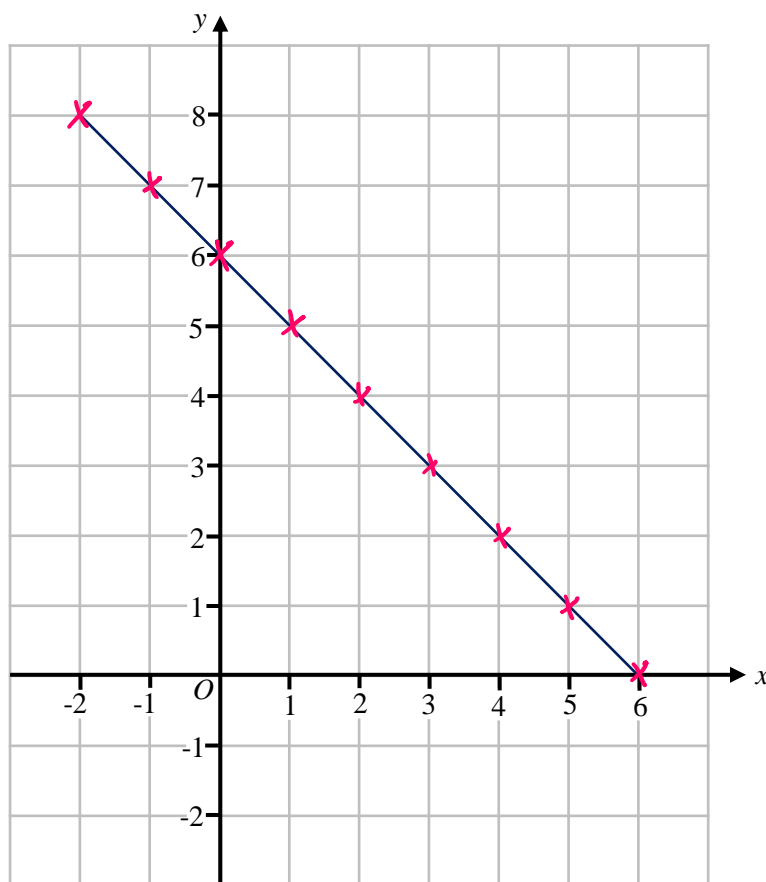


(Total for Question 4 is 3 marks)



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

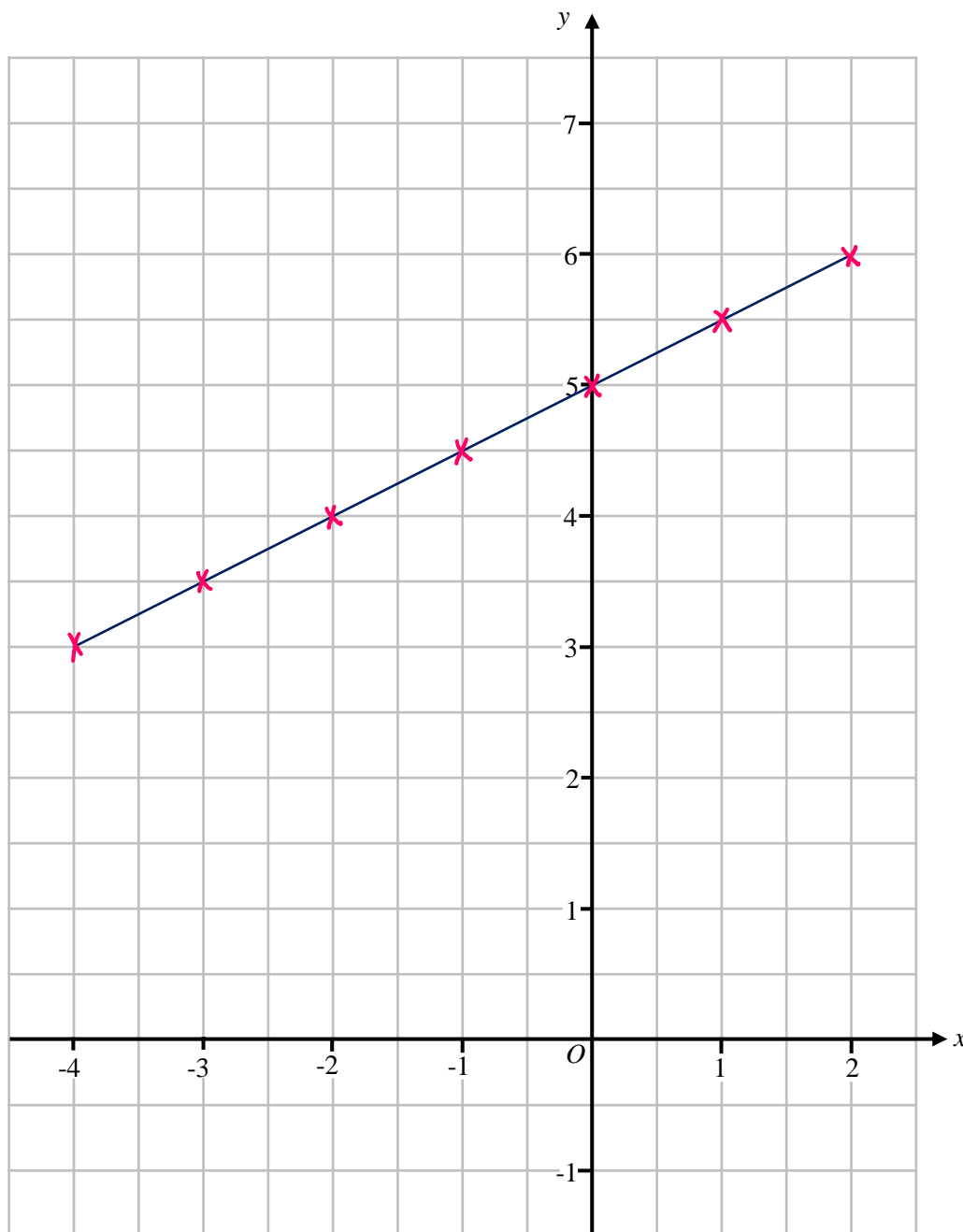
| | | | | | | | | | |
|-----|----|----|---|---|---|---|---|---|---|
| x | -2 | -1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| y | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |



(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)



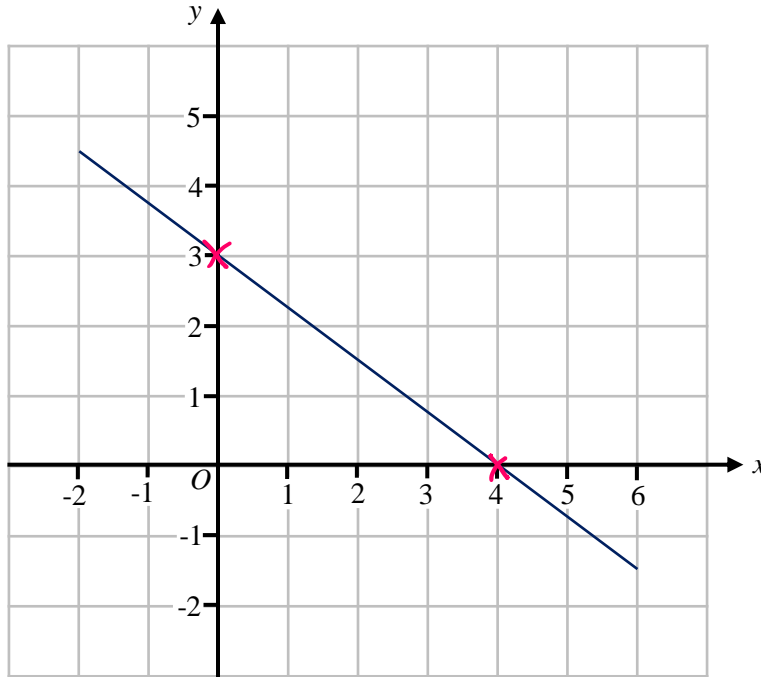
7 On the grid, draw the graph of $3x + 4y = 12$ for values of x from to -2 to 6

$3x = 12$
 $x = 4$

$(4, 0)$

$4y = 12$
 $y = 3$

$(0, 3)$



(Total for Question 7 is 3 marks)

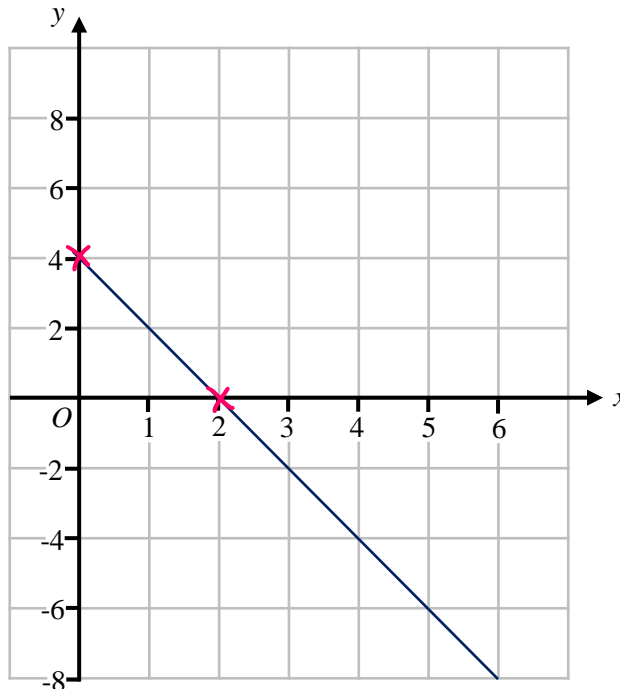
8 On the grid, draw the graph of $4x + 2y = 8$ for values of x from to 0 to 6

$4x = 8$
 $x = 2$

$(2, 0)$

$2y = 8$
 $y = 4$

$(0, 4)$

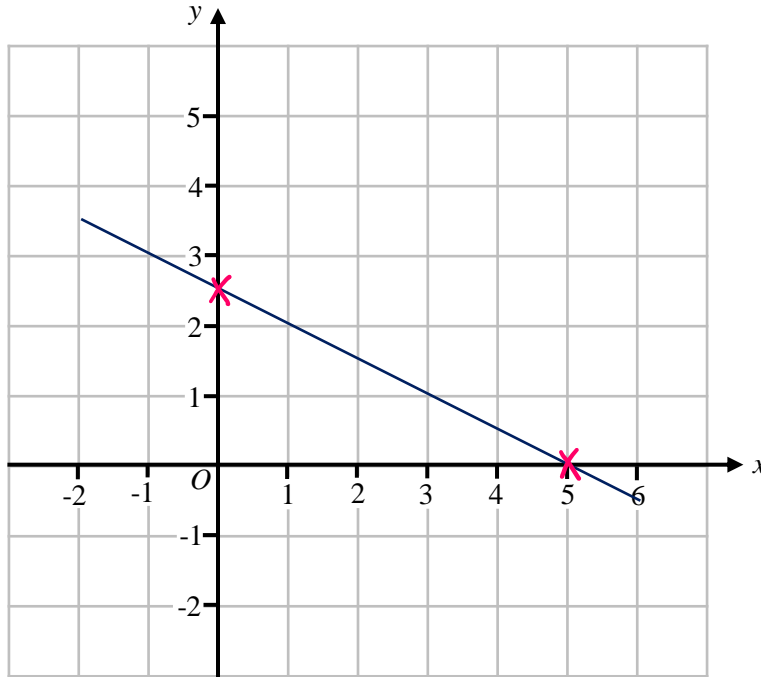


(Total for Question 8 is 3 marks)



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

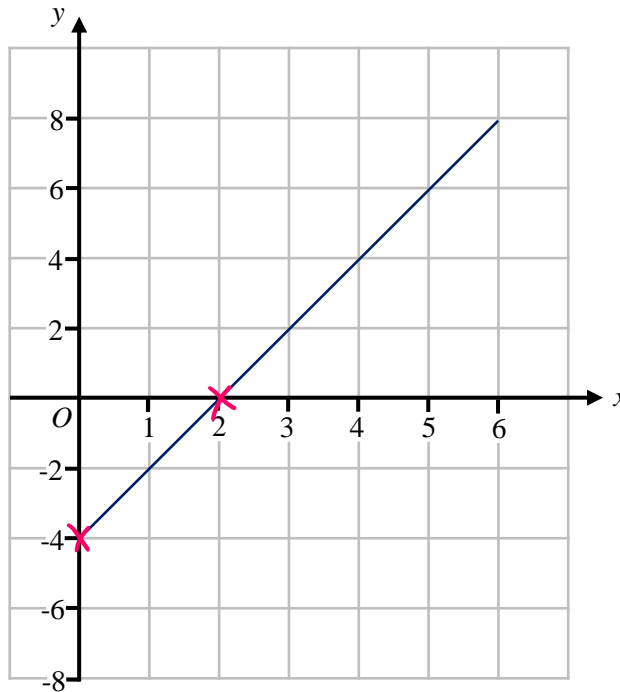
$x = 5$
 $(5, 0)$
 $2y = 5$
 $y = 2.5$
 $(0, 2.5)$



(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

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



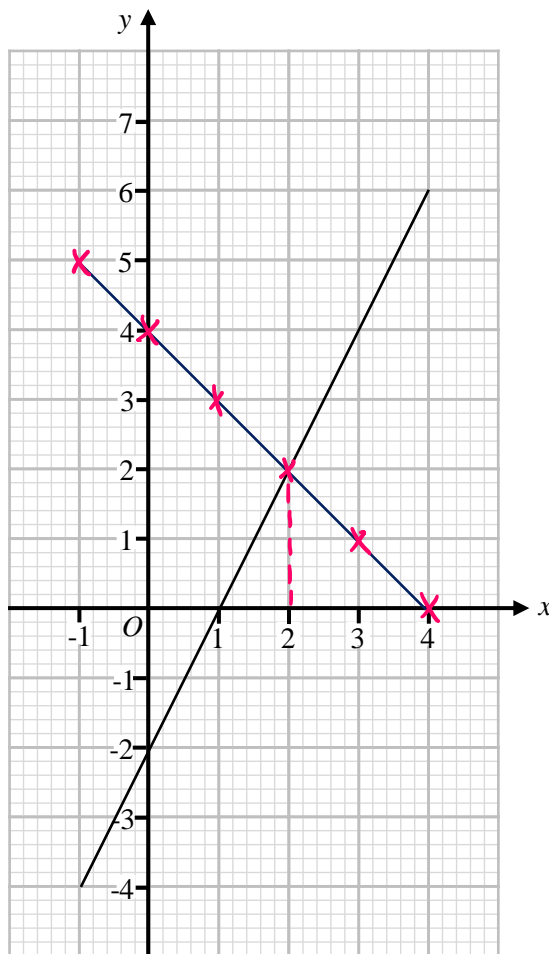
(Total for Question 8 is 3 marks)



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)

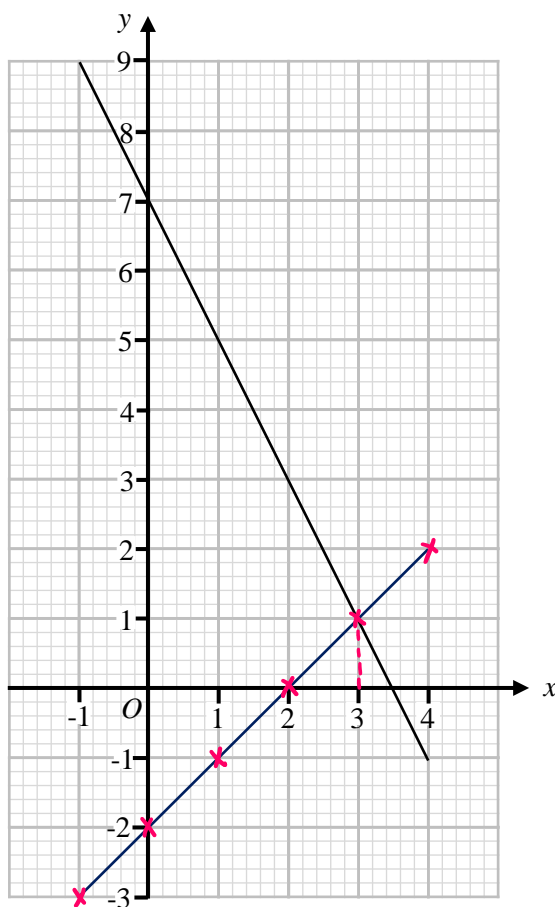
(Total for Question 11 is 4 marks)



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)

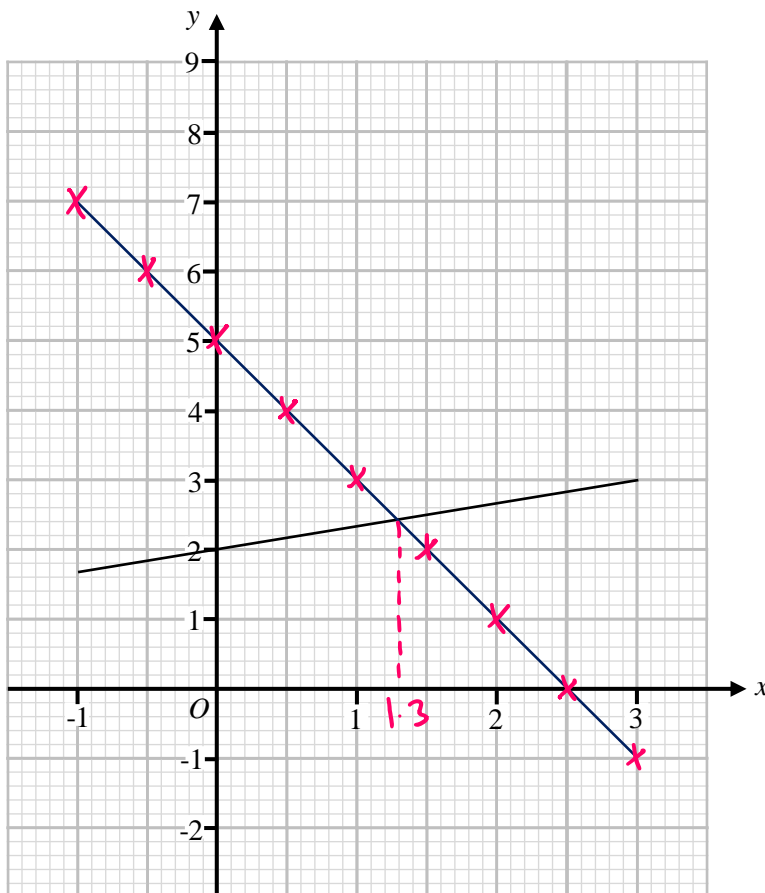
(Total for Question 12 is 4 marks)



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)

