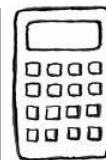


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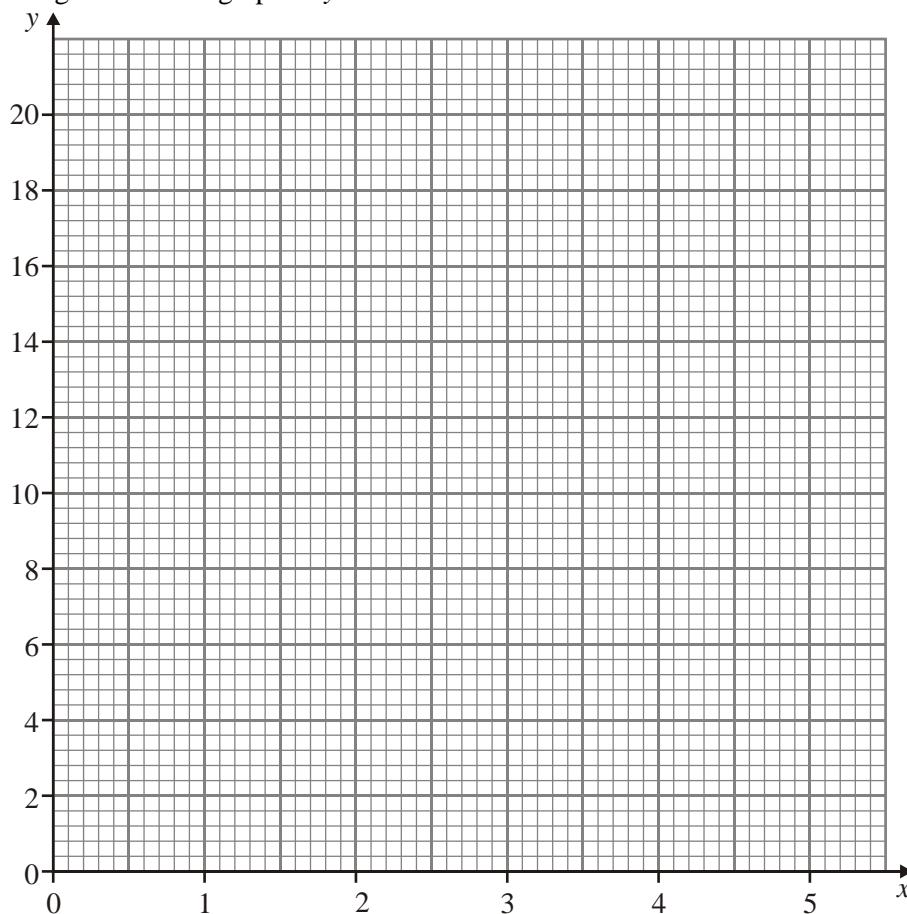
Teacher  
AssessmentTopic 17 - F  
Straight Line Graphs & Quadratic Equations**Section A****Plotting Straight Line Graphs****Grade D / C**

1. (a) Complete the table of values for  $y = 3x + 4$

$x$	0	1	2	3	4	5
$y$	4		10		16	19

(1)

- (b) On the grid draw the graph of  $y = 3x + 4$  for values of  $x$  from 0 to 5.



(2)

- (c) On the grid draw and label the line  $x = 2.5$

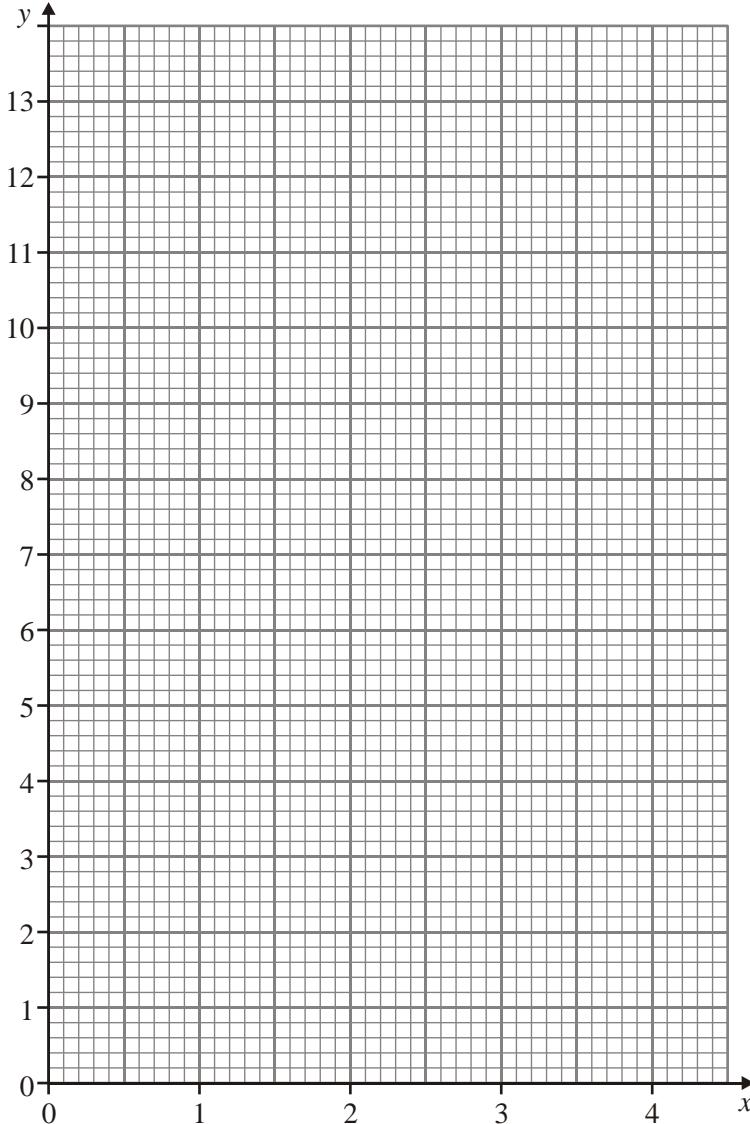
(1)  
**(Total 4 marks)**

2. (a) Complete the table of values for  $y = 3x + 1$

$x$	0	1	2	3	4
$y$	1		7		13

..... (1)

- (b) On the grid draw the graph of  $y = 3x + 1$  for values of  $x$  from 0 to 4.



(2)

- (c) Use your graph to solve  $5.5 = 3x + 1$

.....  
.....

Answer  $x = \dots$

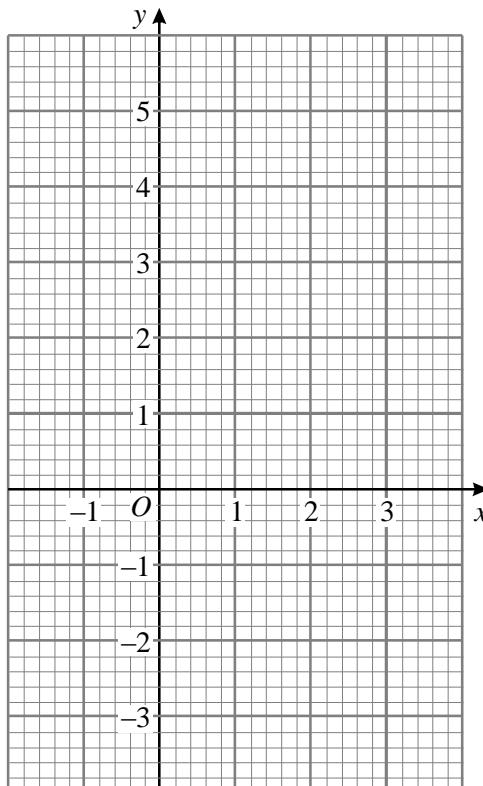
(2)  
**(Total 5 marks)**

3. (a) Complete this table of values for  $y = 2x - 1$

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

..... (1)

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



(2)

- (c) Find the coordinates of the point where the line  $y = 2x - 1$  crosses the line  $y = -2$ .

.....

.....

.....

.....

Answer (....., .....

(2)

**(Total 5 marks)**

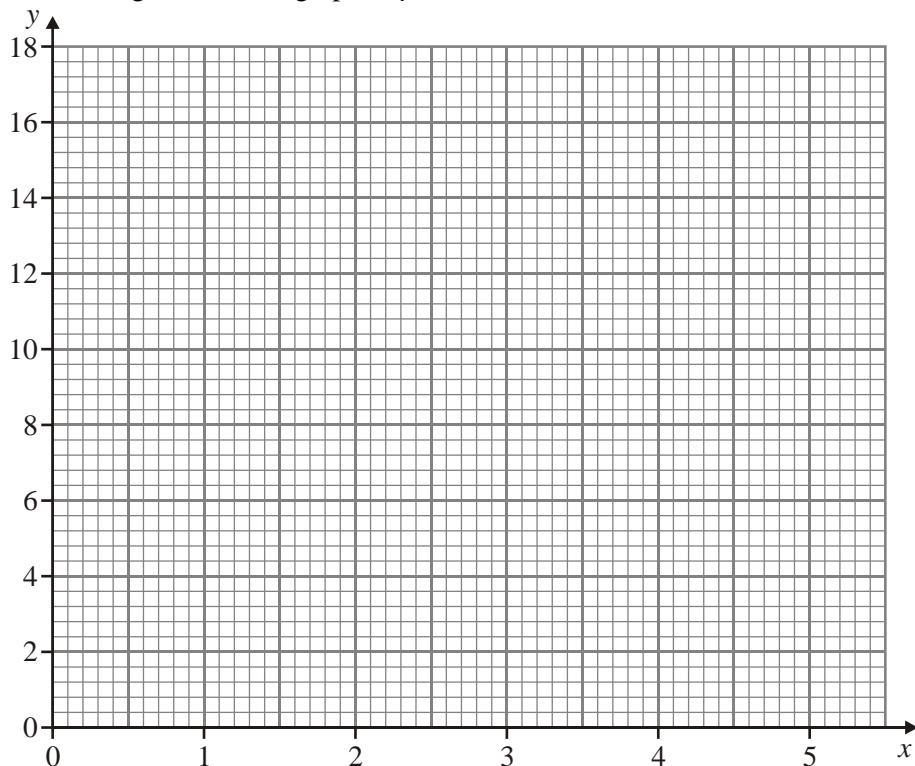
4. (a) (i) Complete the table of values for  $y = 4x - 3$

$x$	1	2	3	4	5
$y$	1			13	17

.....  
 .....  
 .....

(1)

- (ii) On the grid draw the graph of  $y = 4x - 3$  for values of  $x$  from 1 to 5



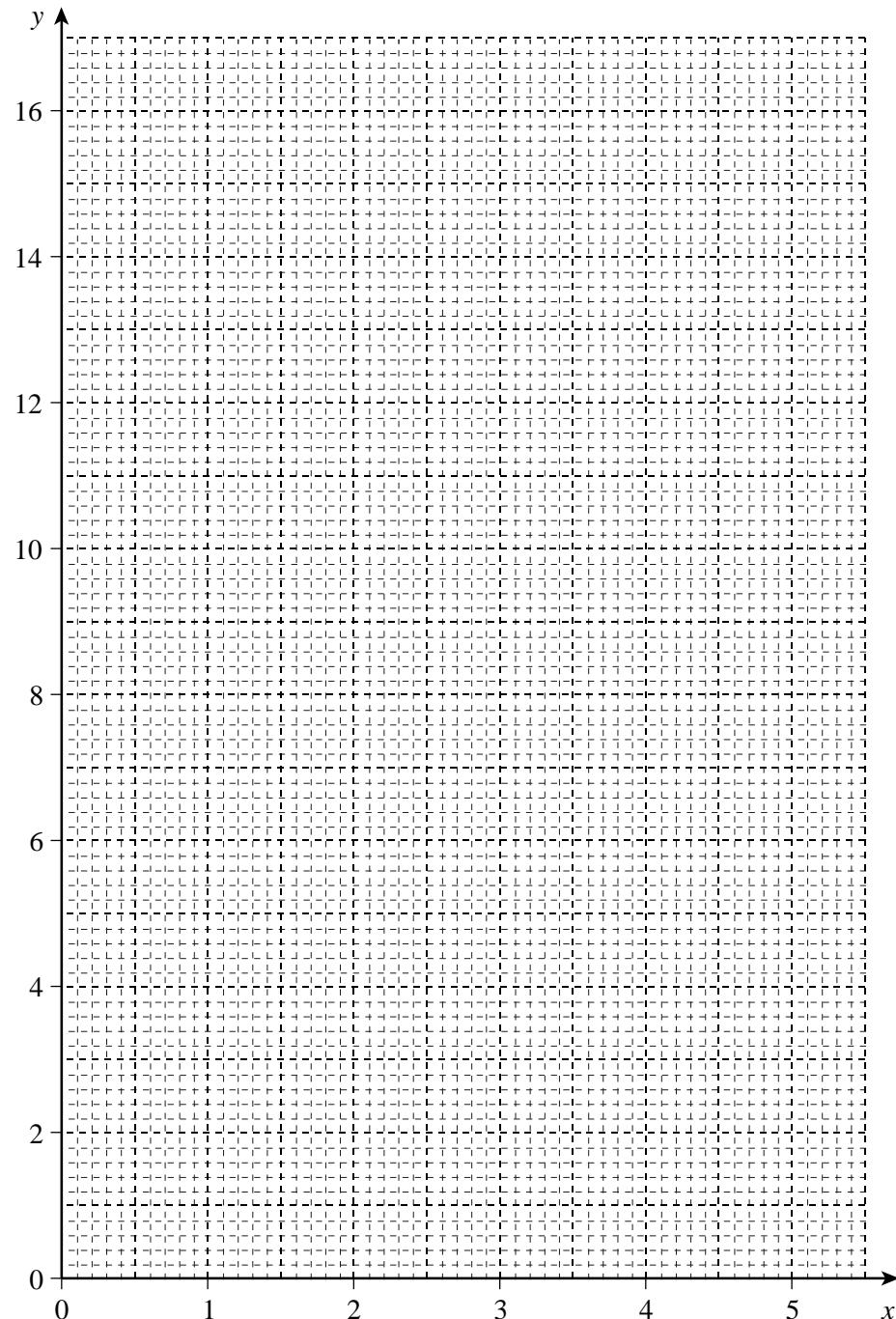
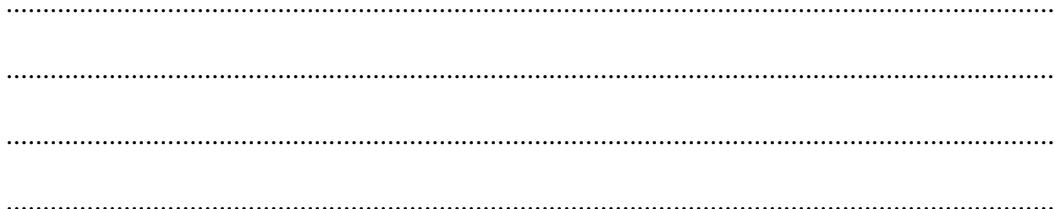
(2)

- (b) Draw and label the line  $y = 7$  on the grid.

(1)

**(Total 4 marks)**

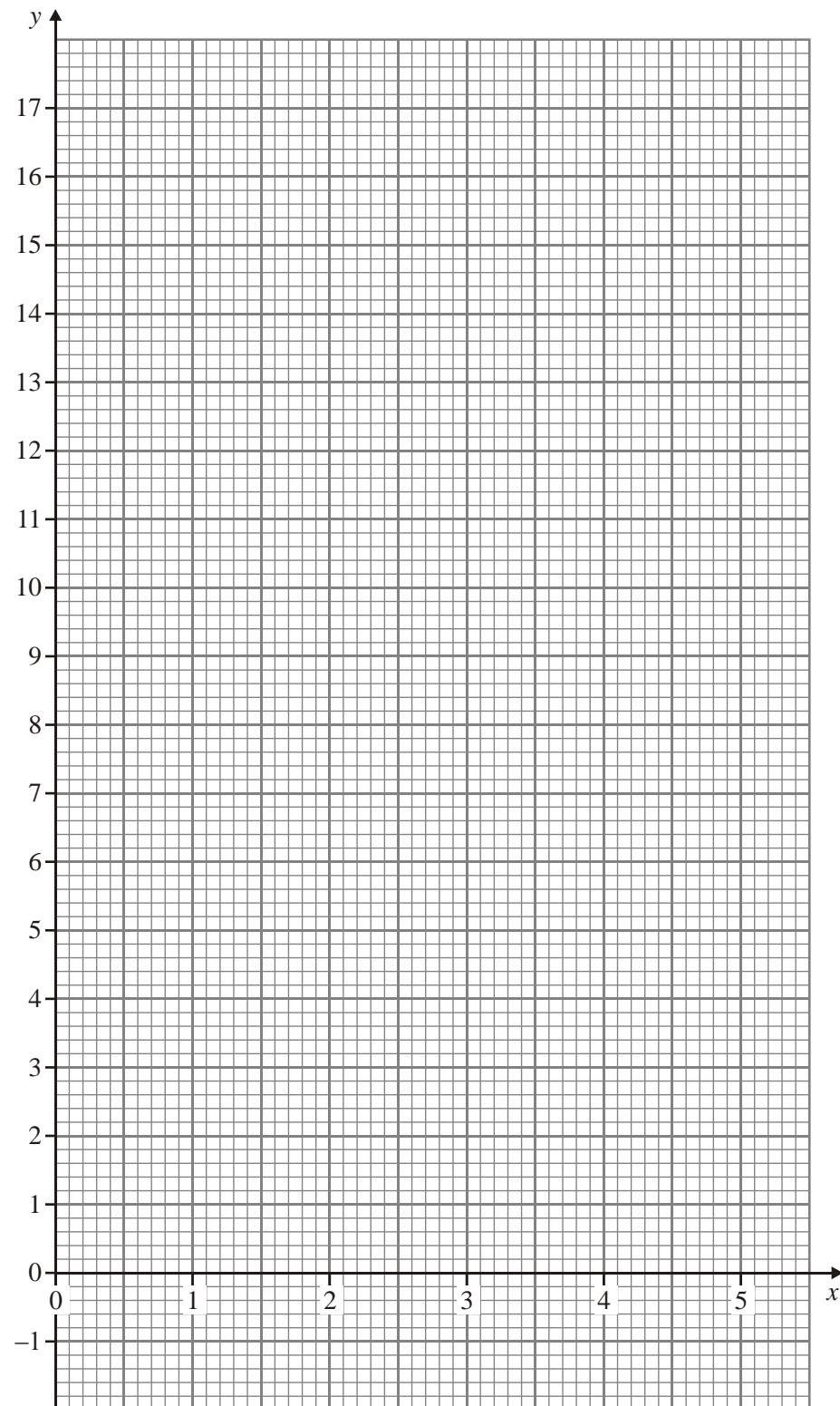
5. On the grid draw the line  $y = 2x + 5$  for values of  $x$  from 0 to 5.



(Total 3 marks)

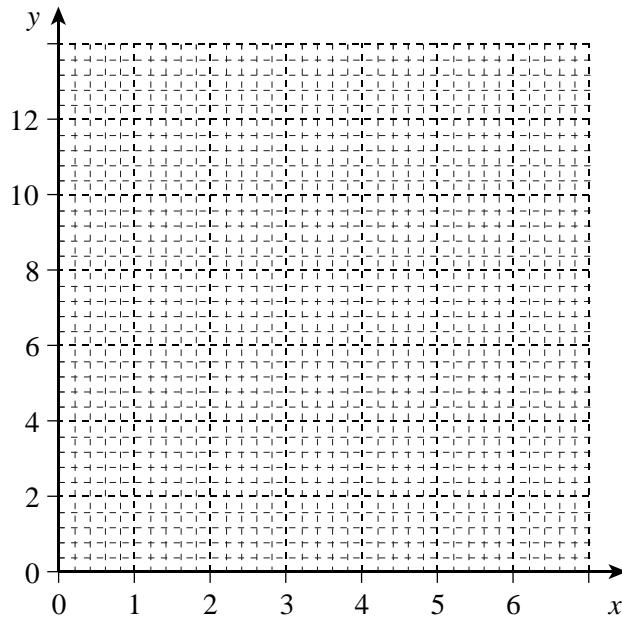
Topic 17 - F  
Straight Line Graphs & Quadratic Equations

6. On the grid below draw the graph of  $y = 3x - 1$  for values of  $x$  from 0 to 5.



**(Total 3 marks)**

7. (a) On the grid draw the graph of  $y = 10 - 2x$  for values of  $x$  from 0 to 5.

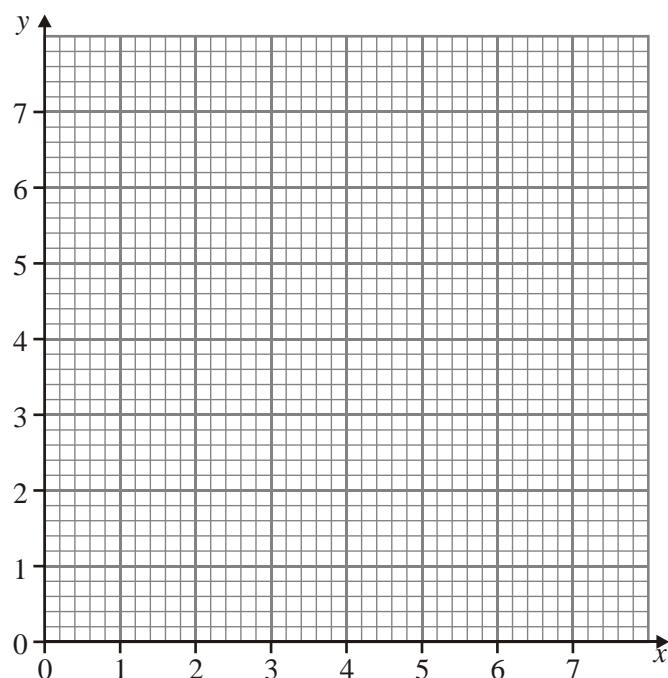
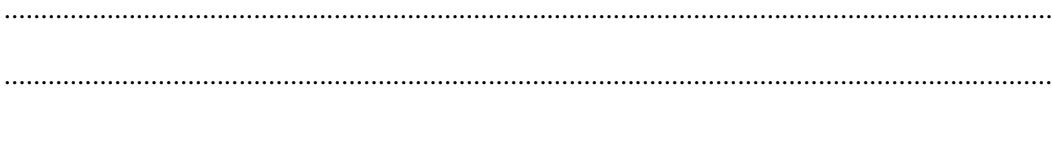


(3)

- (b) On the grid draw the line  $y = 7$

(1)(Total 4 marks)

8. On the grid below, draw the graph of  $y = 7 - x$  for values of  $x$  from 0 to 7.



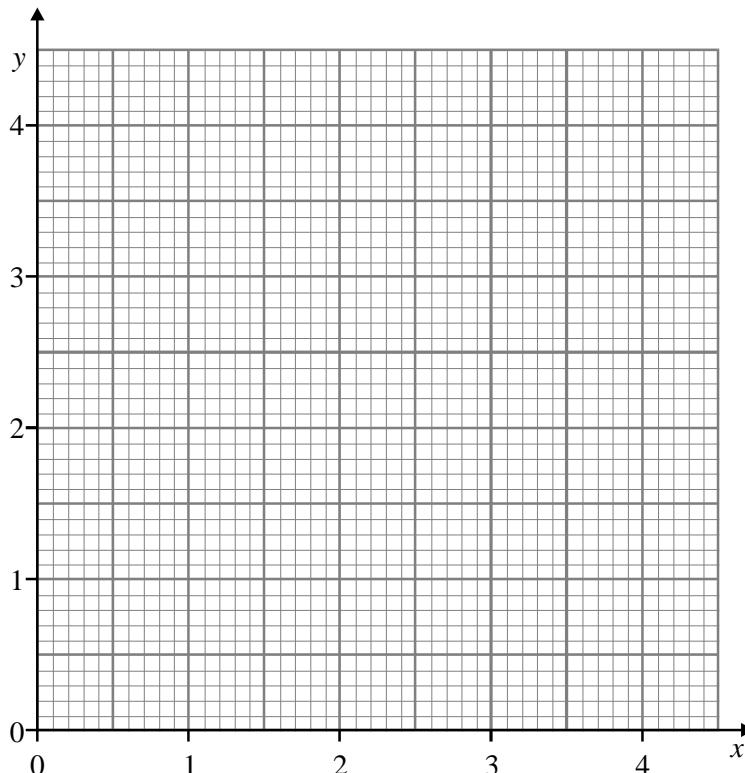
(Total 3 marks)

9. (a) Complete the table of values for the graph of  $x + y = 4$

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

(2)

- (b) On the grid, draw the graph of  $x + y = 4$



(1)

- (c)  $P$  is a point on the line  $x + y = 4$

David says, "the  $x$  coordinate of  $P$  is one greater than the  $y$  coordinate of  $P$ ".

Write down the coordinates of  $P$ .

Answer (....., ....)

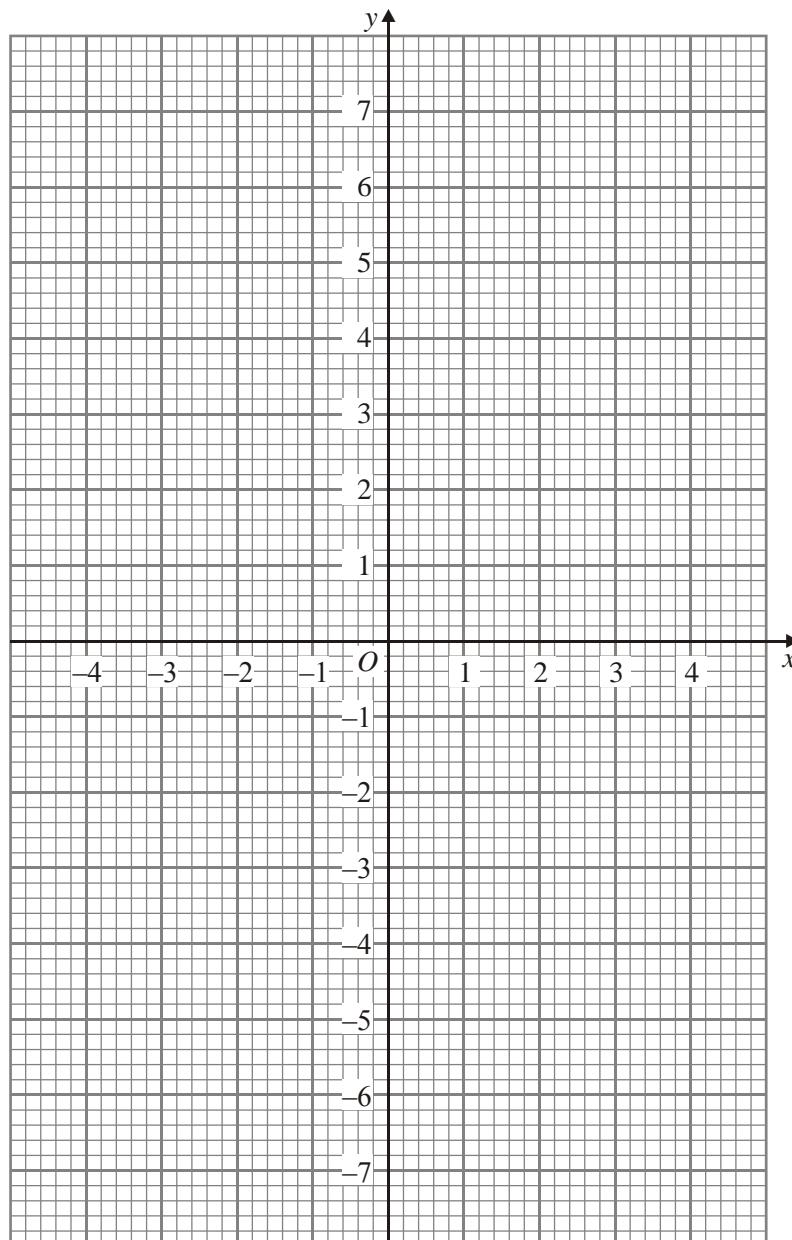
(1)

(Total 4 marks)

Topic 17 - F  
Straight Line Graphs & Quadratic Equations

10. (a) On the grid below draw and label the lines  $y = -4$  and  $y = 2x + 1$

.....  
.....



(4)

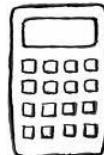
- (b) Write down the coordinates of the point where the lines  $y = -4$  and  $y = 2x + 1$  cross.

Answer ( ..... , ..... )

(1)(Total 5 marks)

Success:

Target:



## Section B

## Quadratic Graphs

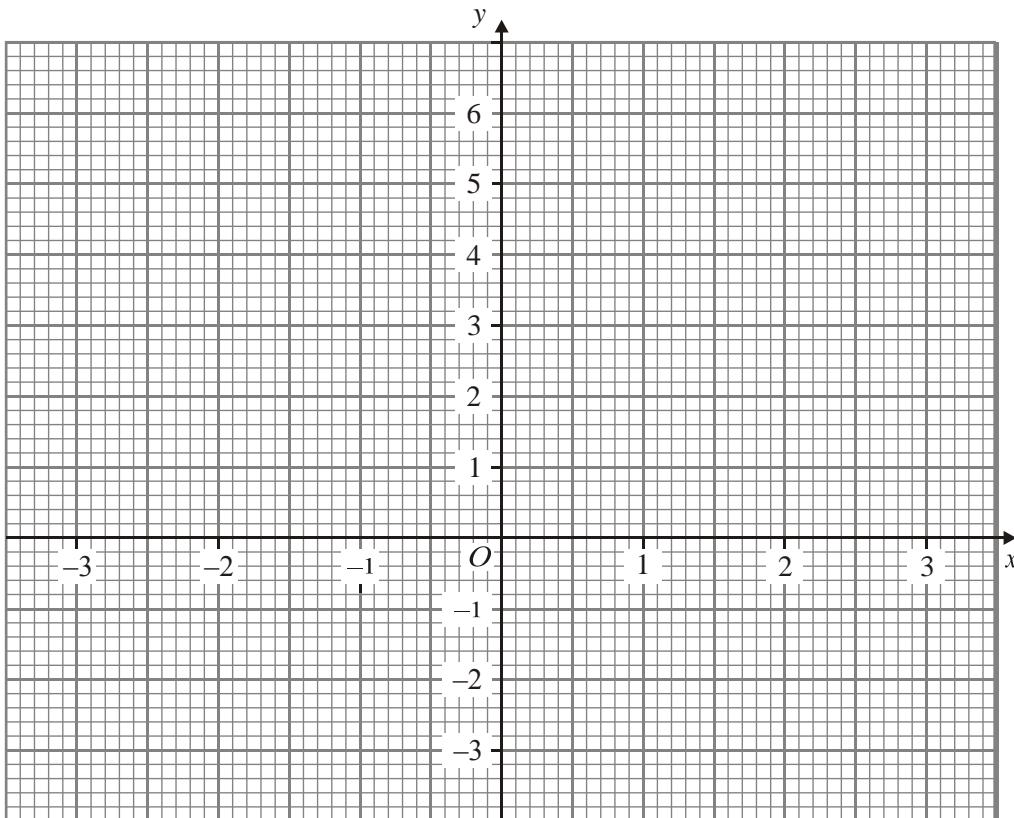
## Grade C

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

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

(1)

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



(2)

- (c) Write down the values of  $x$  at the points where the line  $y = 2$  crosses your graph.

.....

Answer ..... and .....

(2)

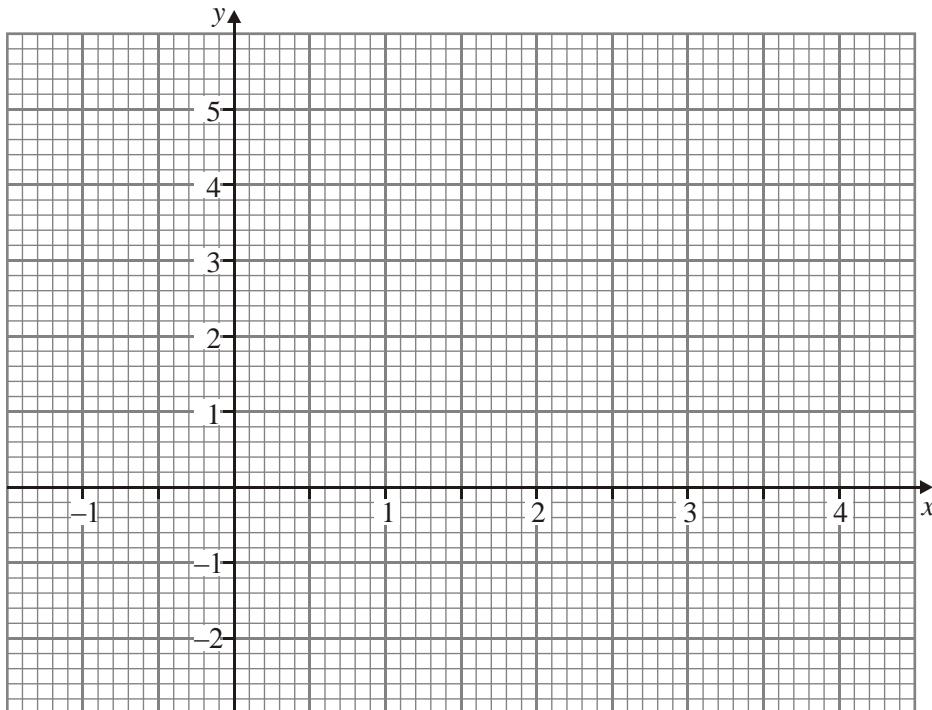
(Total 5 marks)

2. (a) Complete the table for the graph of  $y = x^2 - 3x + 1$ .

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

.....  
..... (2)

- (b) On the grid below, draw the graph of  $y = x^2 - 3x + 1$  for values of  $x$  from -1 to +4.



(2)

- (c) Use your graph to solve the equation  $x^2 - 3x + 1 = 0$ .

.....  
..... Answer ..... and .....

(2)

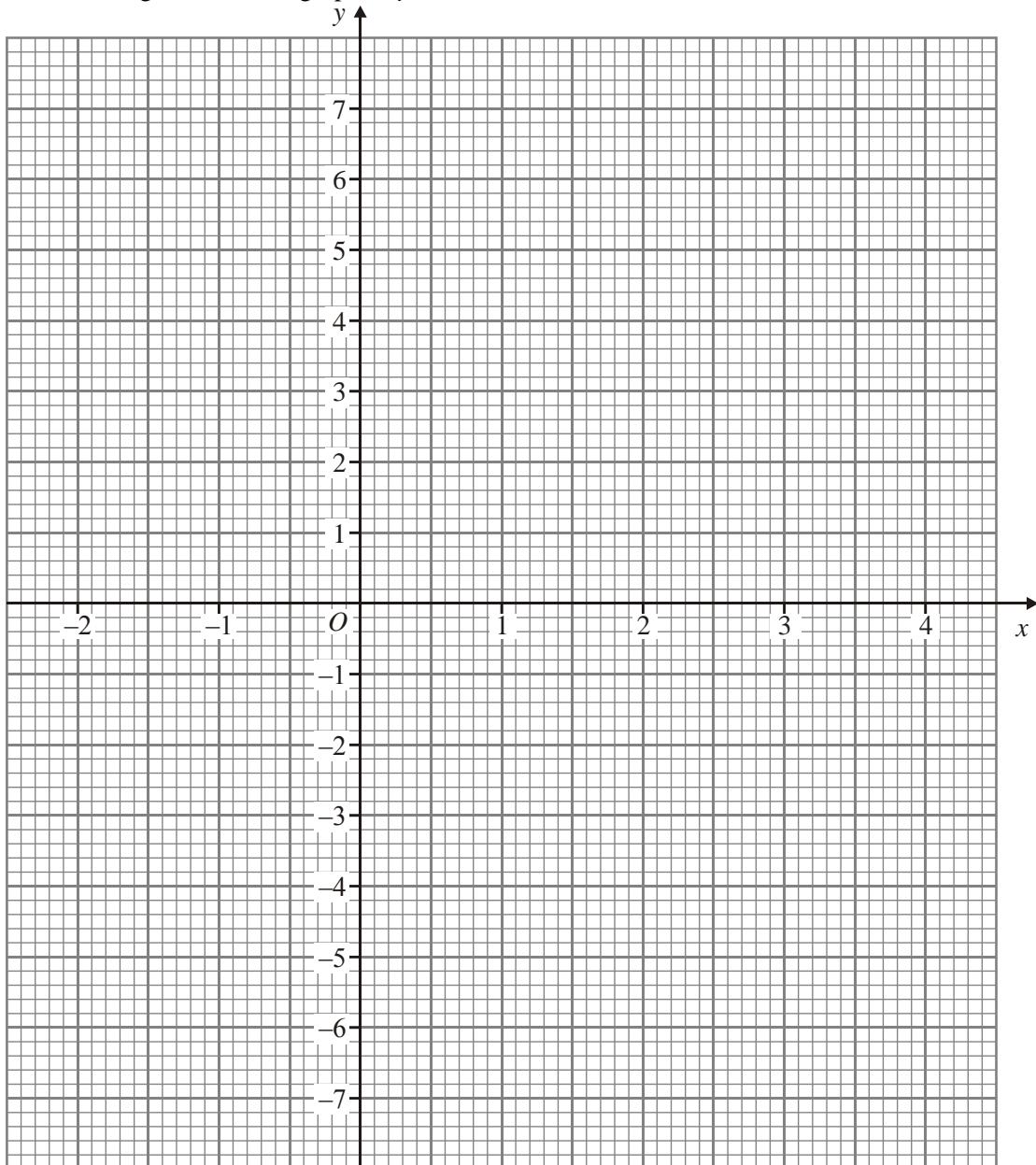
**(Total 6 marks)**

3. (a) Complete this table of values for  $y = (2 + x)(3 - x)$

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

.....  
.....  
**(2)**

- (b) On the grid, draw the graph of  $y = (2 + x)(3 - x)$  for values of  $x$  from -2 to +4.



**(2)**  
**(Total 4 marks)**

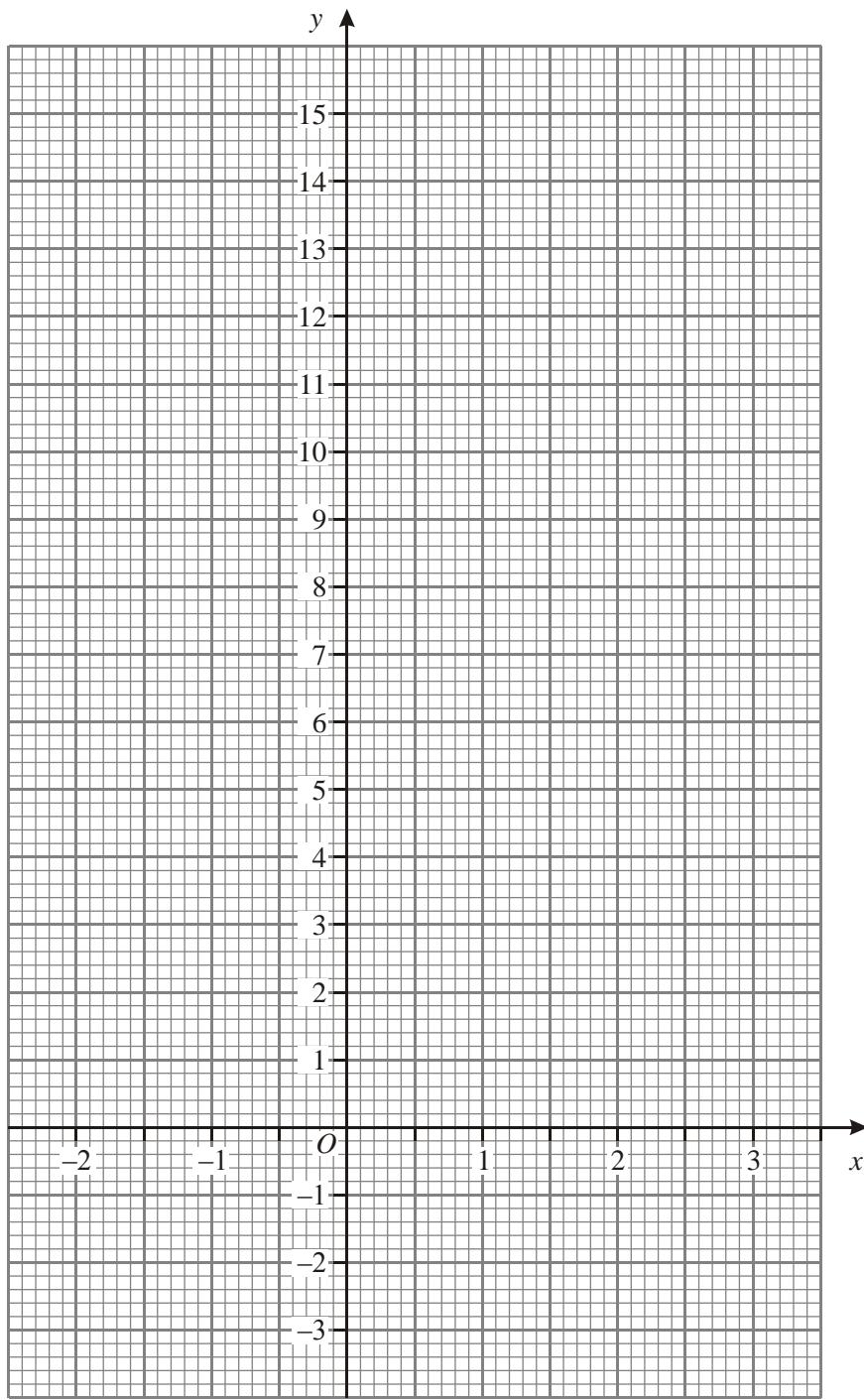
4. (a) Complete the table of values for  $y = 2x^2 - 4x - 1$

$x$	-2	-1	0	1	2	3
$y$	15		-1		-1	5

.....  
 .....  
 .....

(2)

- (b) On the grid, draw the graph of  $y = 2x^2 - 4x - 1$  for values of  $x$  from -2 to +3.



(2)

- (c) An approximate solution of the equation  $2x^2 - 4x - 1 = 0$  is  $x = 2.2$

- (i) Explain how you can find this from the graph.

.....

.....

(1)

- (ii) Use your graph to write down another solution of this equation.

Answer  $x = \dots$

(1)

(Total 6 marks)

5. (a) Complete the table of values for  $y = x^2 - 4x - 1$ .

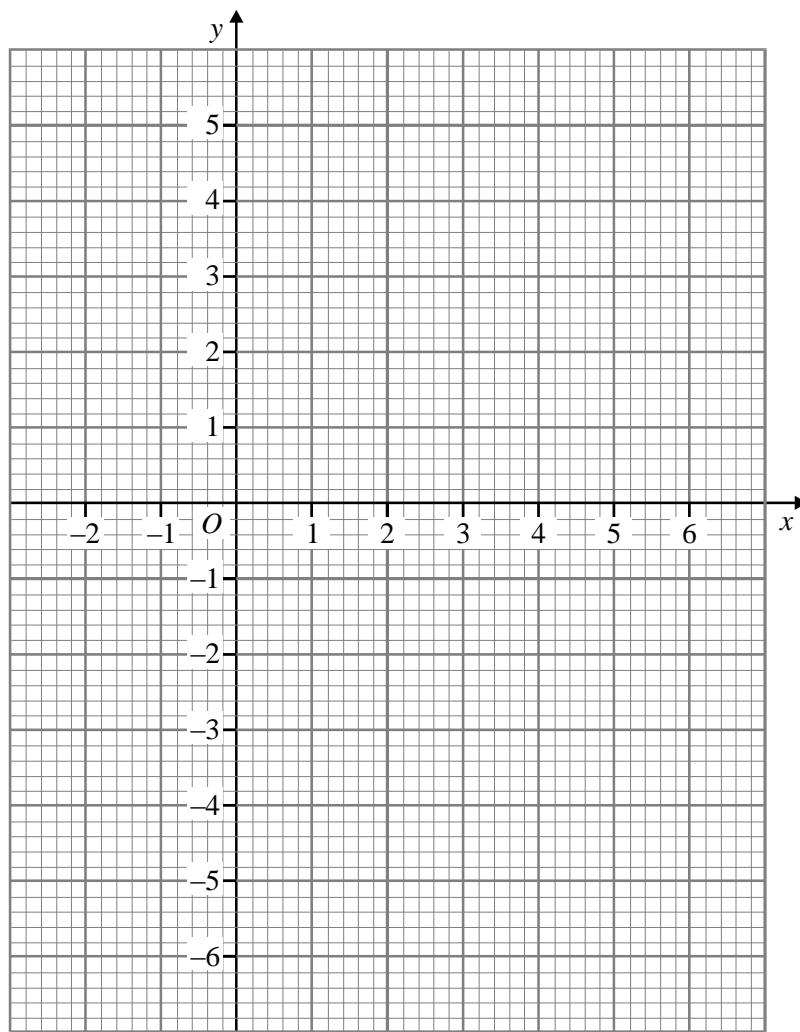
$x$	-1	0	1	2	3	4	5
$y$		-1	-4		-4	-1	4

.....

.....

(2)

- (b) On the grid, draw the graph of  $y = x^2 - 4x - 1$  for values of  $x$  from -1 to +5.



(2)

- (c) Use your graph to solve the equation  $x^2 - 4x - 1 = 0$ .

Answer ..... and .....

(2)(Total 6 marks)

Success:

Target: