Q1.

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

x	−3	−2	−1	0	1	2	3
y	−10		0	2		0	−4

....

....

(2)

(b) Draw the graph of $y = 2 + x - x^2$ for values of x from −3 to 3
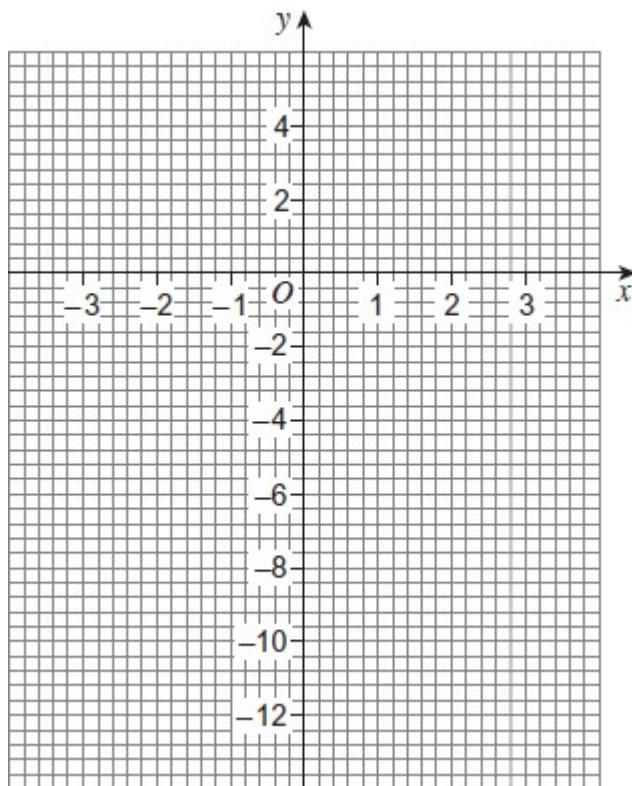
(2)

(c) Draw the line $y = -3$ on the same grid.

(1)

(d)   Write down the solutions to the equation $2 + x - x^2 = -3$

Answer ....

(1)

(Total 6 marks)

Q2.

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

x	−3	−2	−1	0	1	2	3
y		−1	2		2		−6

(2)

(b)   Draw the graph of $y = 3 - x^2$ for values of x from − 3 to 3
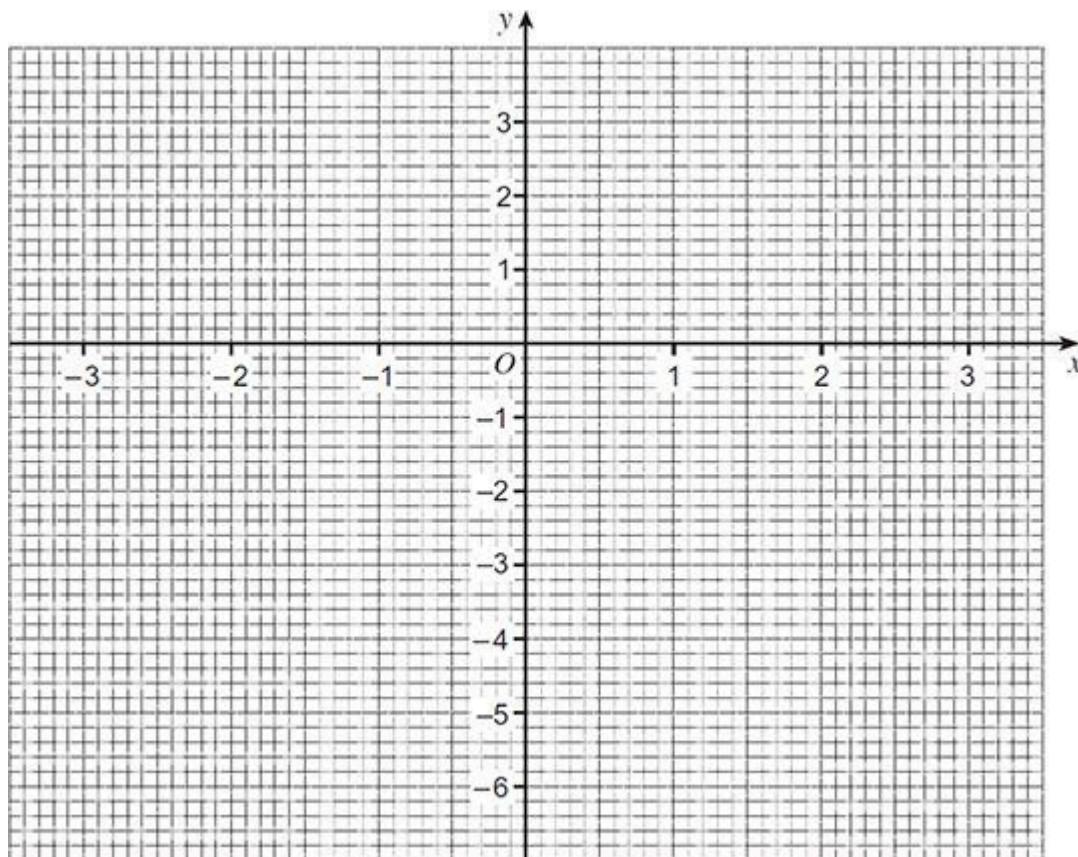
(2)

(c) Use the graph to work out the values of x when $y = -1.5$

....

....

Answer .... and ....

(2)
(Total 6 marks)

Q3.(a) Complete the table of values for $y = x^2 - 3$

x	−2	−1	0	1	2
y	1				1

(2)

(b) Draw the graph of $y = x^2 - 3$ for values of x from -2 to 2.
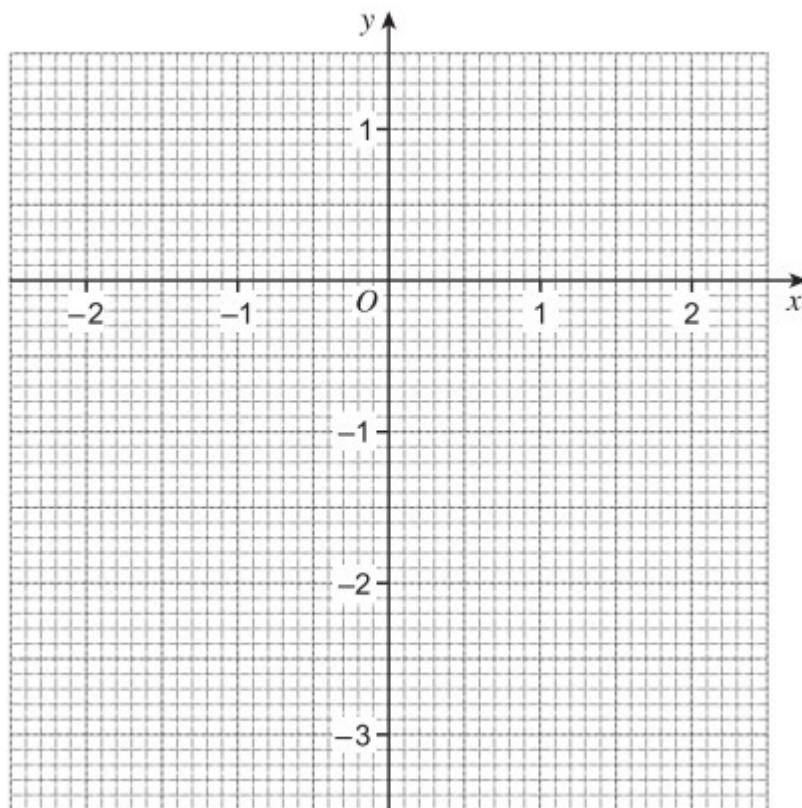
(2)

(c)   Use your graph to work out the values of x when $y = 0.5$

....

....

Answer .... and ....

(2)
(Total 6 marks)

Q4.

Draw the graph of $x + y = 2$ for values of x from −3 to 3.
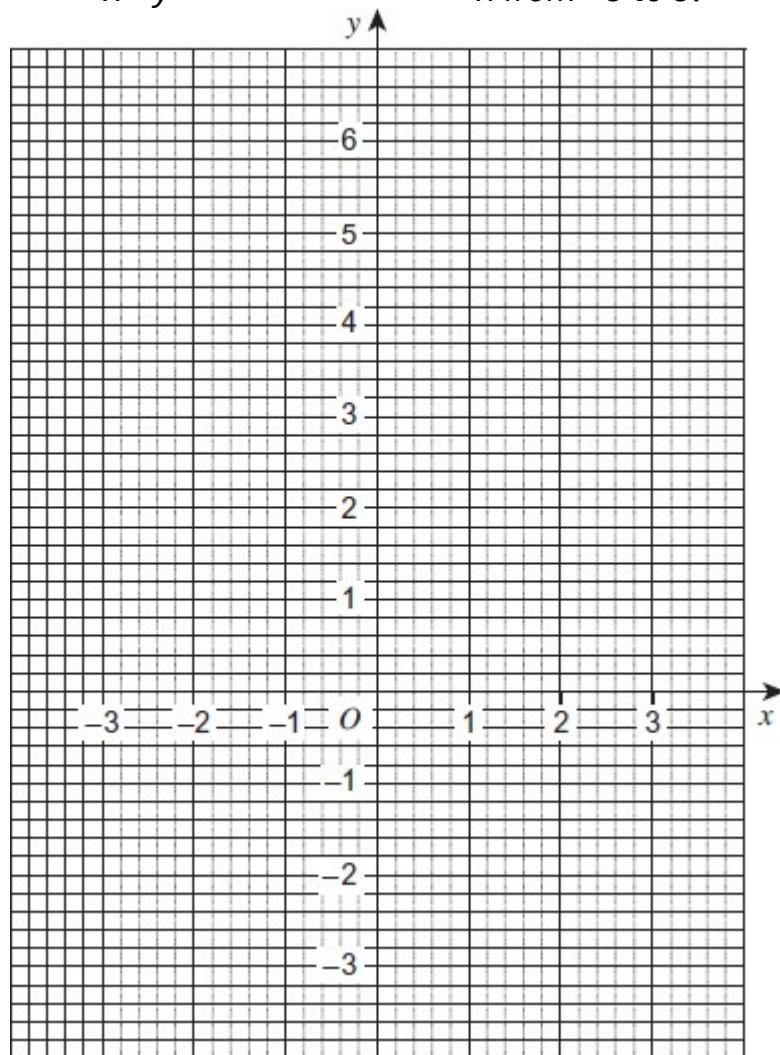
(Total 3 marks)

Q5.(a) Complete the table of values for $y = x^2$

x	−2	−1	0	1	2
y	4			1	

(2)

(b) On the grid, draw the graph of $y = x^2$ for values of x from −2 to 2.
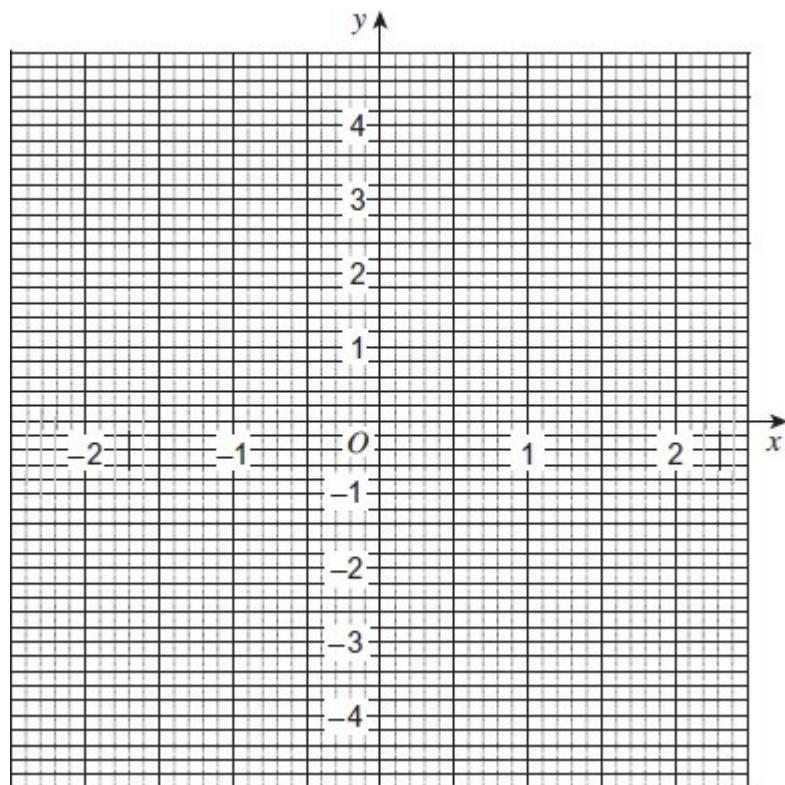
(2)
(Total 4 marks)

Q6.(a) Complete the table of values for $y = x^2$

x	−2	−1	0	1	2
y	4			1	

(2)

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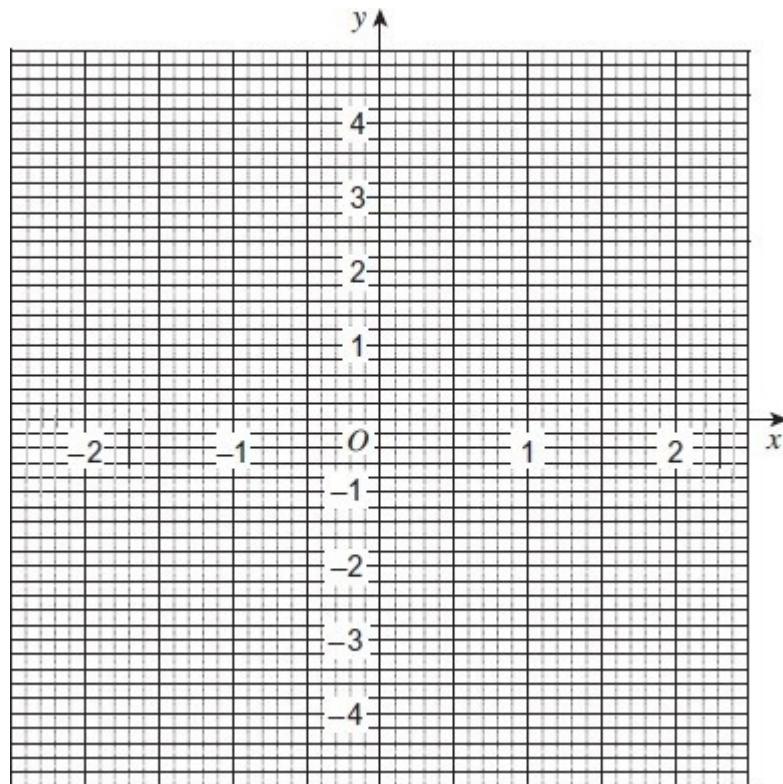
(2)

(c)   On the same grid, draw the graph of $y = x^2 - 3$ for values of x from −2 to 2.

(2)

(Total 6 marks)

Q7.(a)   Complete the table of values for $y = x^2 - 4$

x	− 3	− 2	− 1	0	1	2	3
y	5	0	−3			0	

(2)

(b)   Draw the graph of $y = x^2 - 4$ for values of x from −3 to 3.
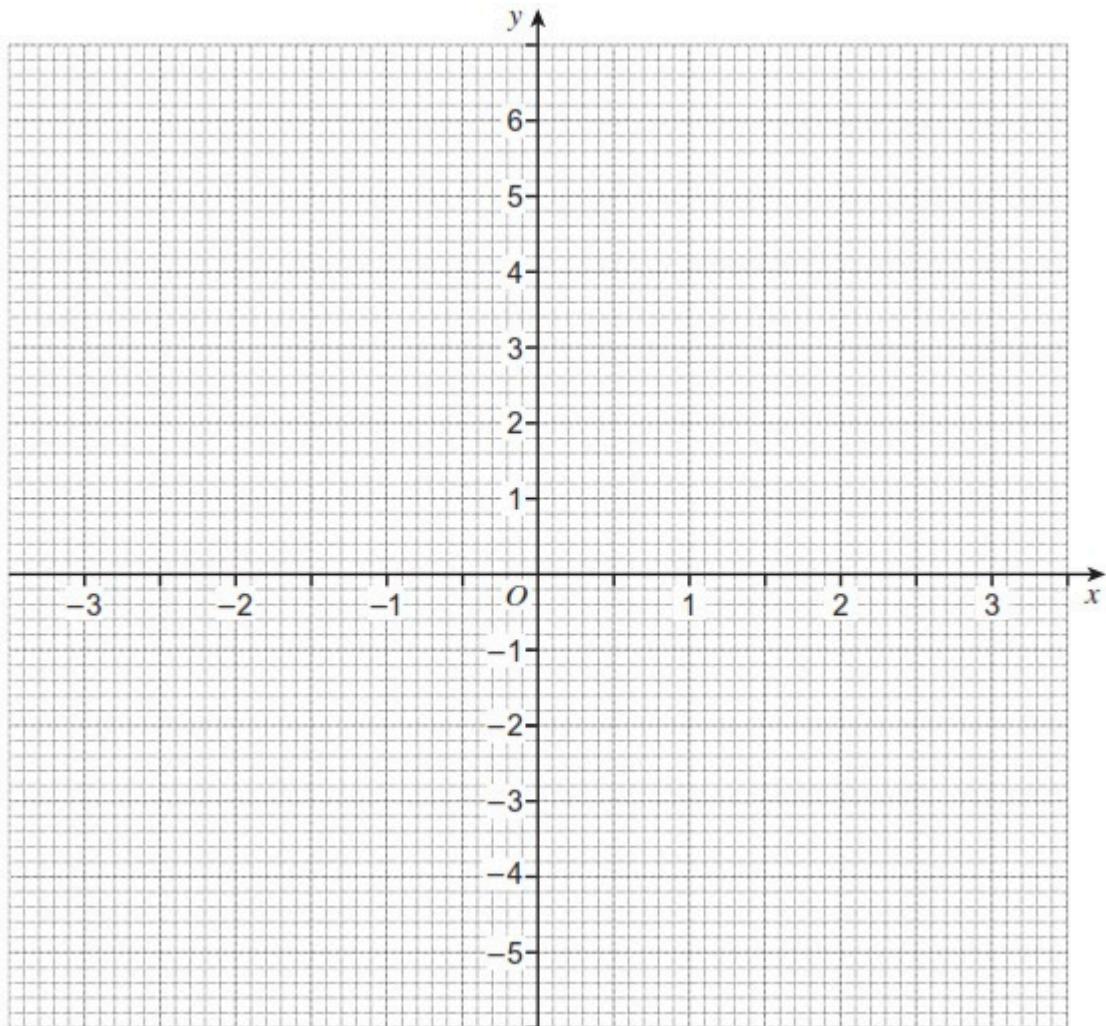
(3)

(c)   Draw the graph of $y = 2$ on the grid opposite for values of x from −3 to 3.

(1)

(d)   Write down the coordinates of the points of intersection of the two graphs.

Answer .... and ....

(2)

(Total 8 marks)

Q8.(a)   Complete the table of values for $y = 2x^2 - 3$

x	−2	−1	0	1	2
y	5			−1	

(2)

(b)   Draw the graph of $y = 2x^2 - 3$ for values of x from −2 to 2.
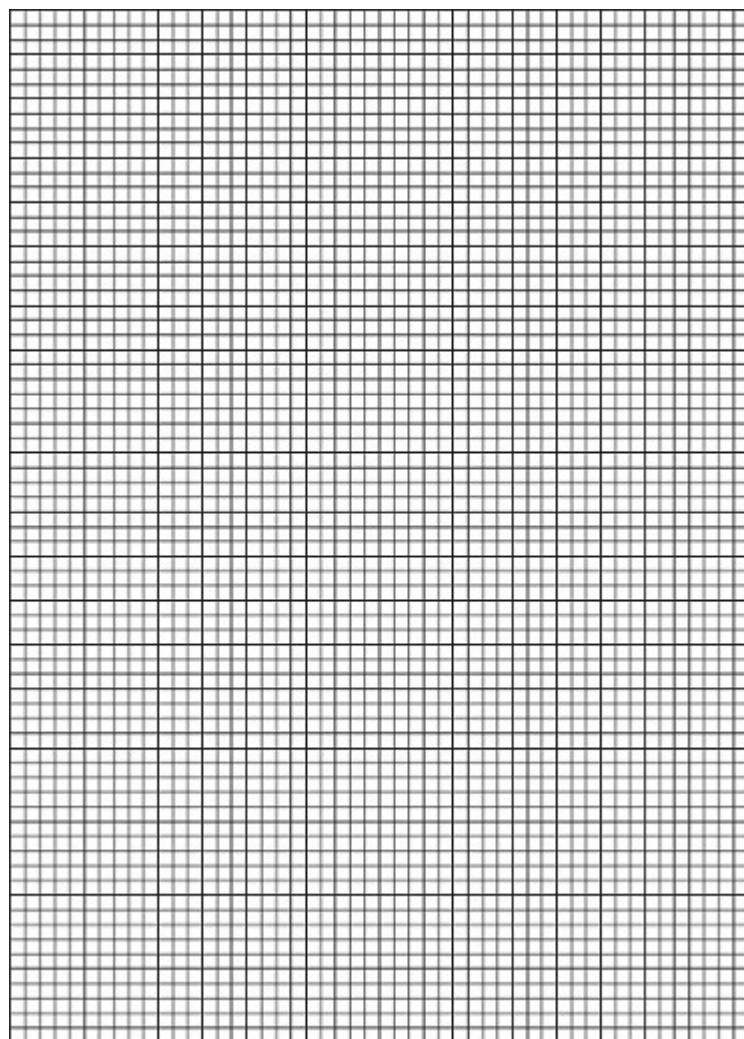
(4)
(Total 6 marks)

Q9.(a)   Complete the table of values for $y = x^2 - 5$

x	−3	−2	−1	0	1	2	3
y		−1	−4	−5		−1	4

(2)

(b)   Draw the graph of $y = x^2 - 5$ for values of x from −3 to 3.
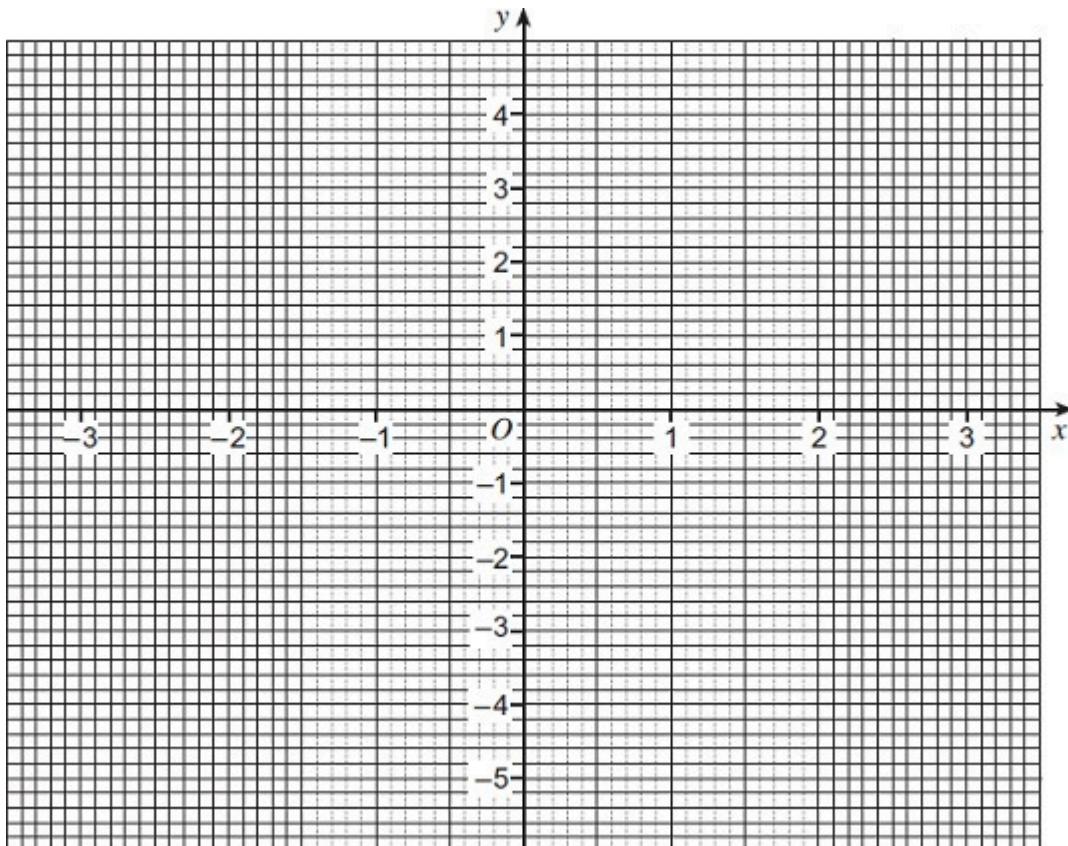
(3)

(c)   Write down the values of x when $y = 0$

Answer .... and ....

(2)
(Total 7 marks)