



SCAN ME

Quadratic Graphs



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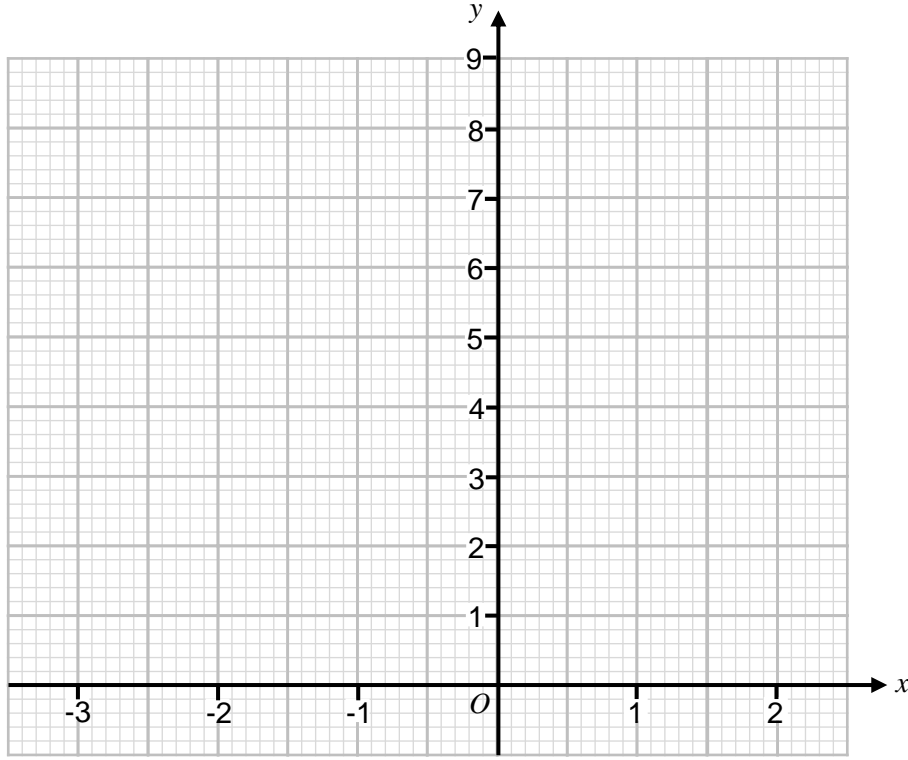
REVISE THIS TOPIC

CHECK YOUR ANSWERS

1 (a) Complete the table of values for $y = x^2 + x + 2$ [2 marks]

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

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

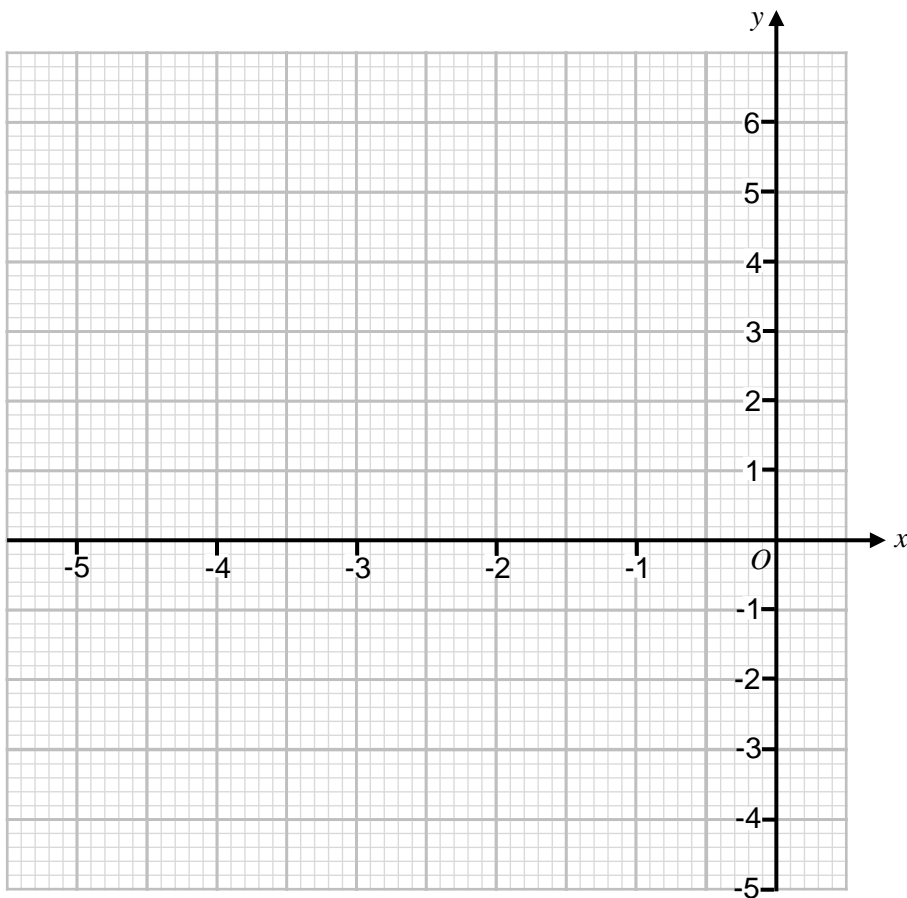




2 (a) Complete the table of values for $y = x^2 + 4x$ [2 marks]

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

2 (b) On the grid, draw the graph of $y = x^2 + 4x$ for values of x from -5 to 0 [2 marks]

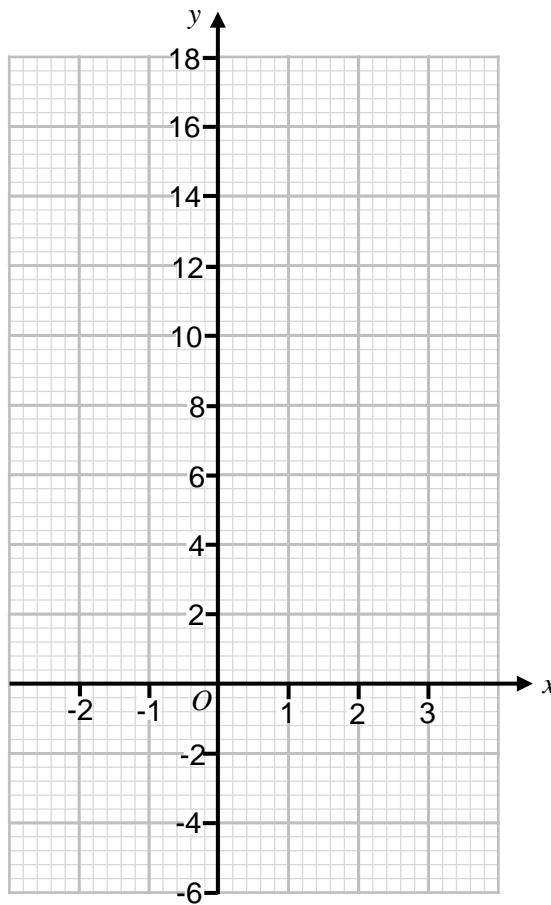




3 (a) Complete the table of values for $y = x^2 + 5$ [2 marks]

x	-2	-1	0	1	2	3
y			5	6	9	

3 (b) On the grid, draw the graph of $y = x^2 + 5$ for values of x from -2 to 3 [2 marks]



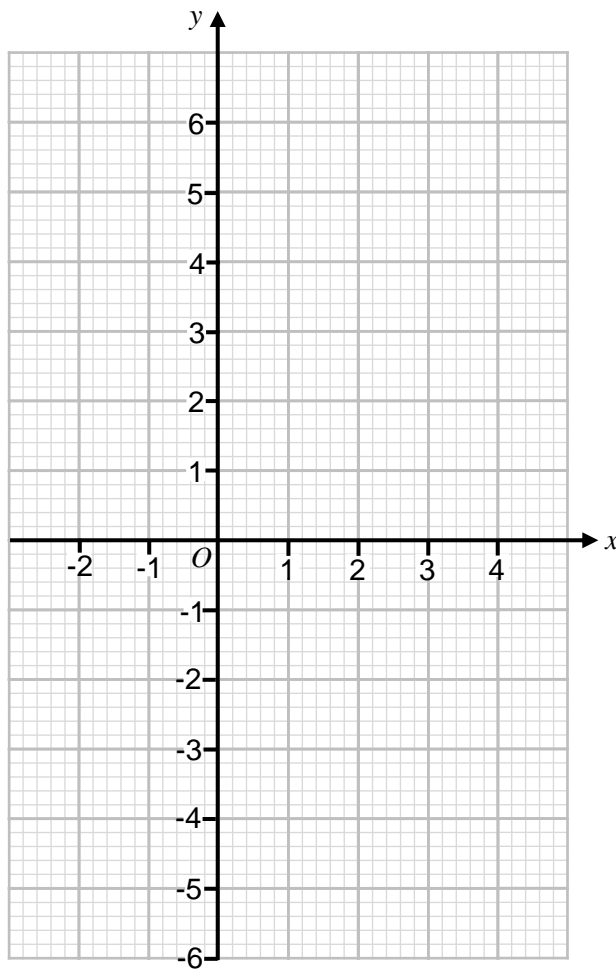
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4 (a) Complete the table of values for $y = x^2 - 2x - 3$ [2 marks]

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

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

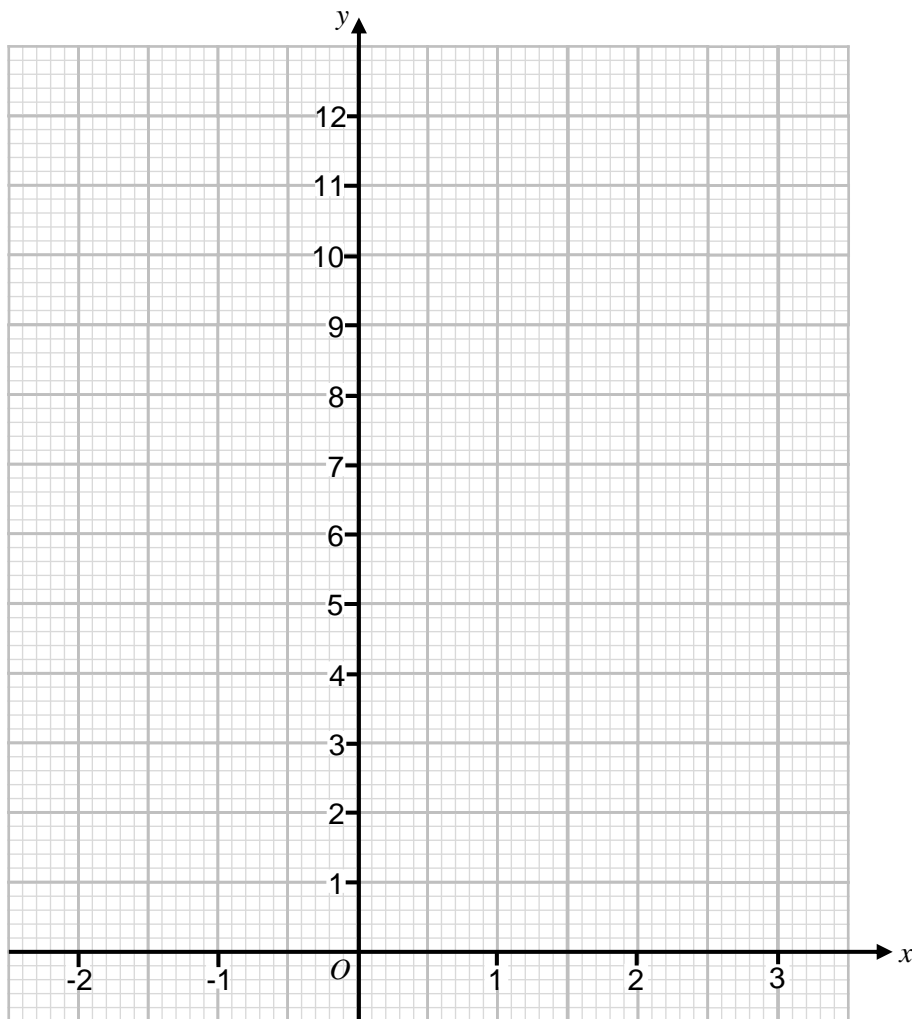




5 (a) Complete the table of values for $y = x^2 - 3x + 2$ [2 marks]

x	-2	-1	0	1	2	3
y	12			0		2

5 (b) On the grid, draw the graph of $y = x^2 - 3x + 2$ for values of x from -2 to 3 [2 marks]



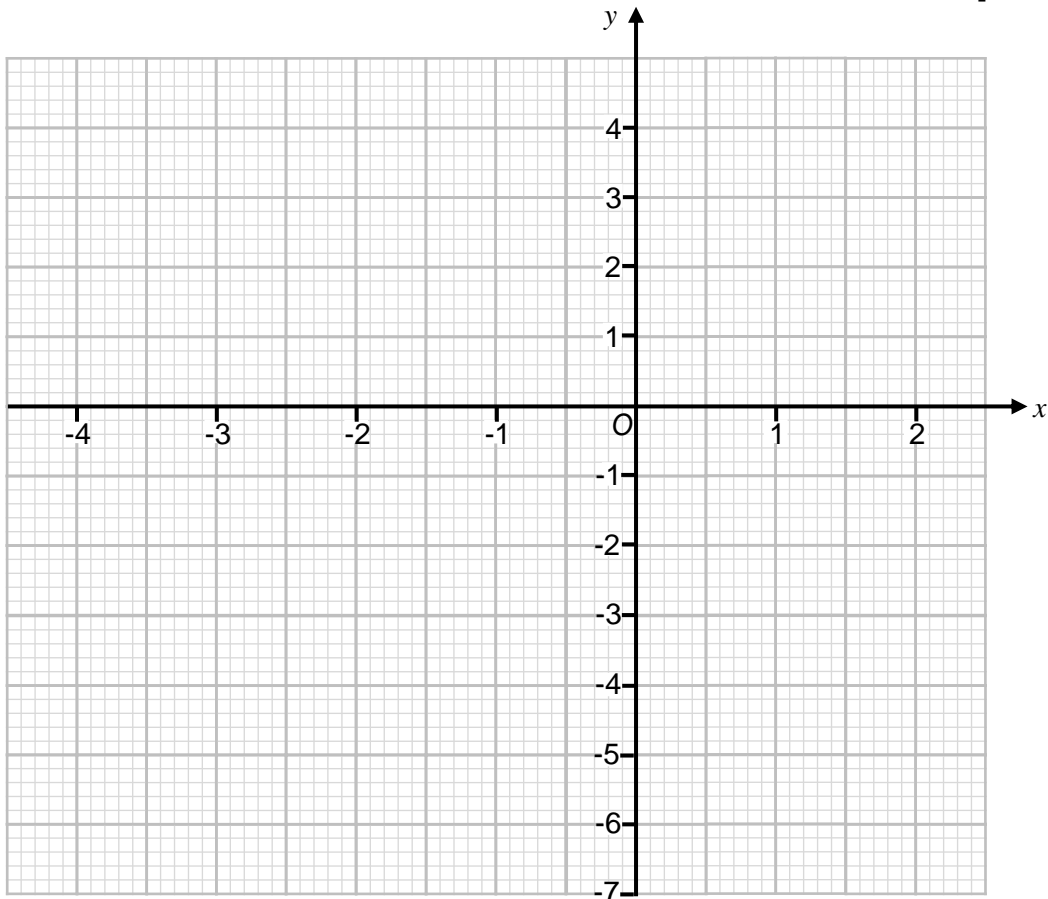
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- 6 (a) Complete the table of values for $y = x^2 + 2x - 5$ [2 marks]

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

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



- 6 (c) Use your graph to estimate the roots of the equation $x^2 + 2x - 5 = 0$ [2 marks]

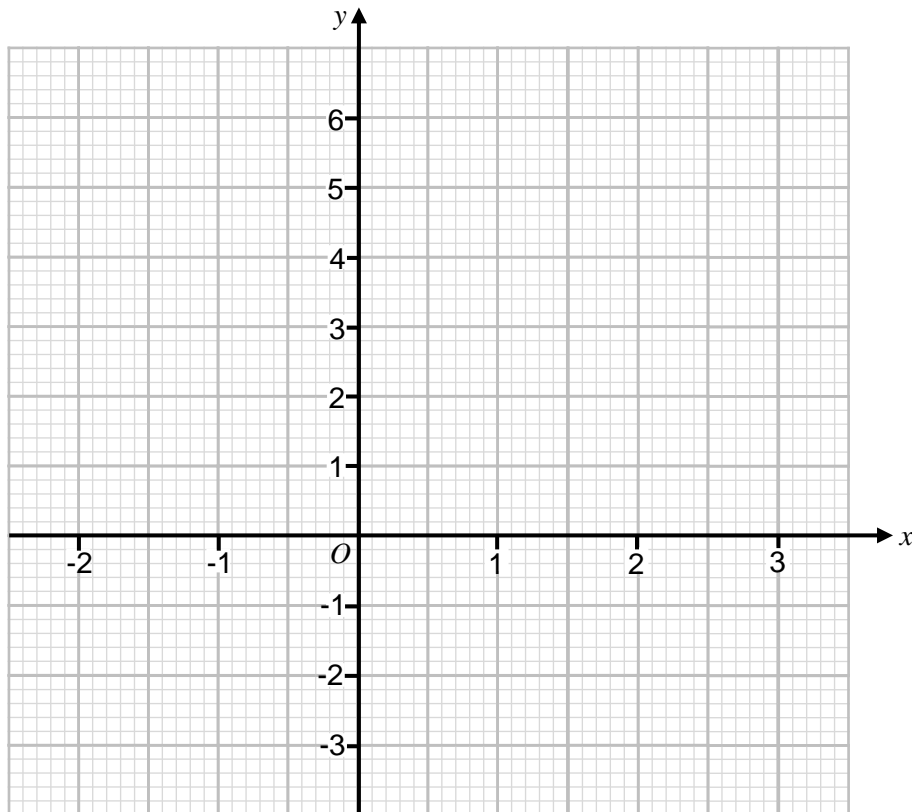
Answer _____ and _____



- 7 (a) Complete the table of values for $y = x^2 - x - 1$ [2 marks]

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

- 7 (b) On the grid, draw the graph of $y = x^2 - x - 1$ for values of x from -2 to 3 [2 marks]

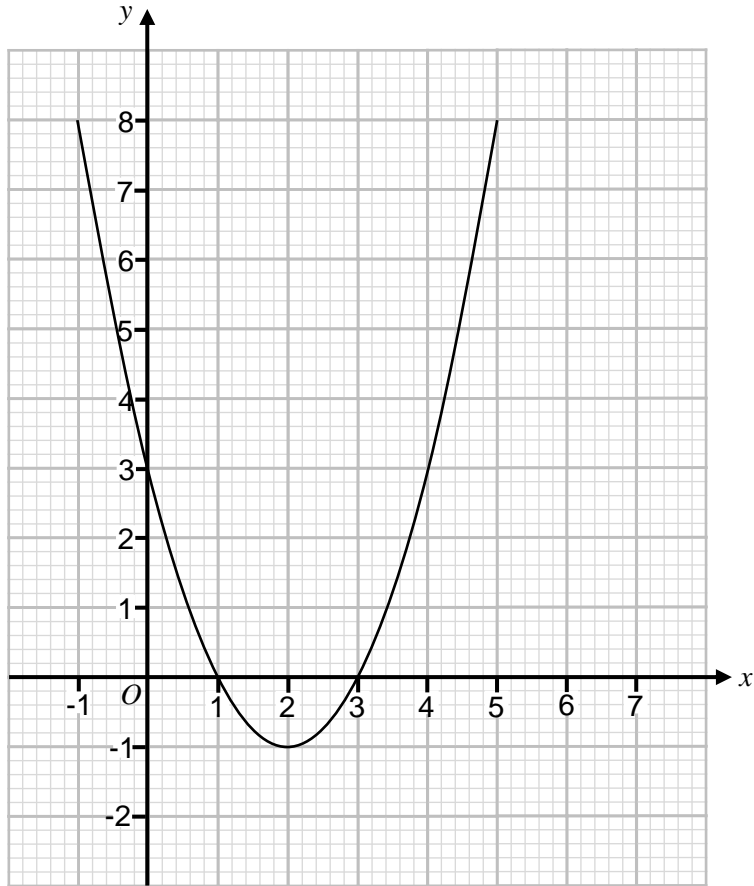


- 7 (c) Use your graph to estimate the roots of the equation $x^2 - x - 1 = 0$ [2 marks]

Answer _____ and _____



8 Here is the graph of $y = x^2 - 4x + 3$ for x values from -1 to 5



8 (a) Write down the roots of $x^2 - 4x + 3 = 0$ [2 marks]

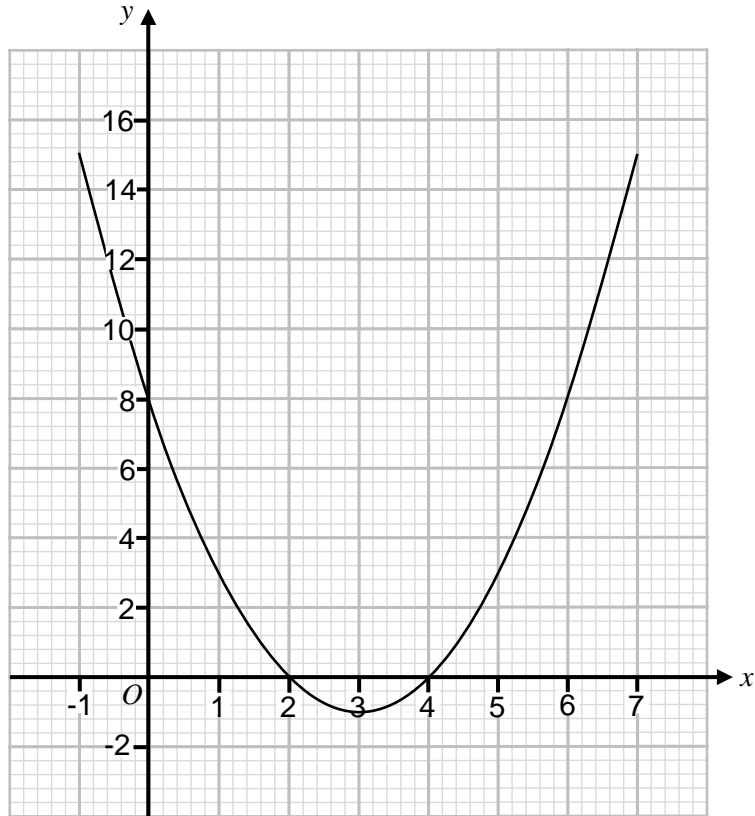
Answer _____ and _____

8 (b) Write down the coordinates of the turning point of the graph $y = x^2 - 4x + 3$ [1 mark]

Answer (_____ , _____)



9 Here is the graph of $y = x^2 - 6x + 8$ for x values from -1 to 7



9 (a) Write down the roots of $x^2 - 6x + 8 = 0$ [2 marks]

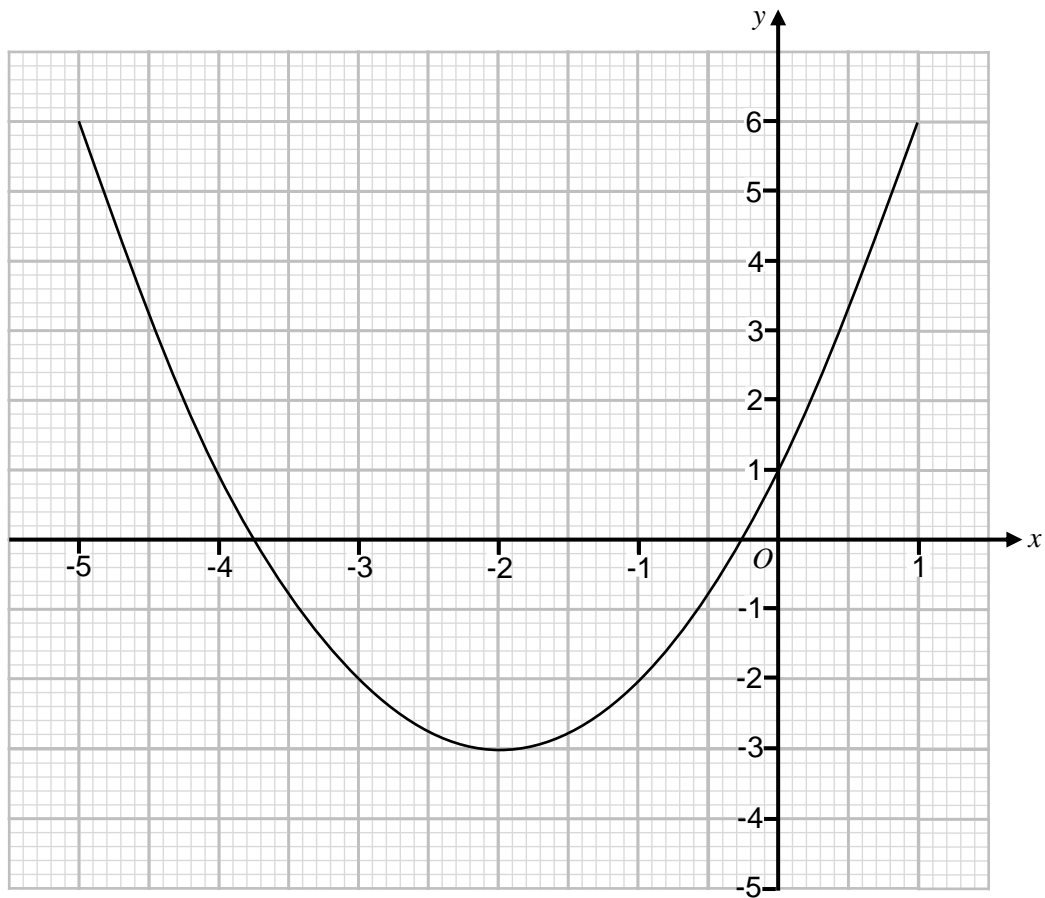
Answer _____ and _____

9 (b) Write down the coordinates of the turning point of the graph $y = x^2 - 6x + 8$ [1 mark]

Answer (_____ , _____)



10 Here is the graph of $y = x^2 + 4x + 1$ for x values from -5 to 1



10 (a) Write down estimate for the roots of $x^2 + 4x + 1 = 0$ [2 marks]

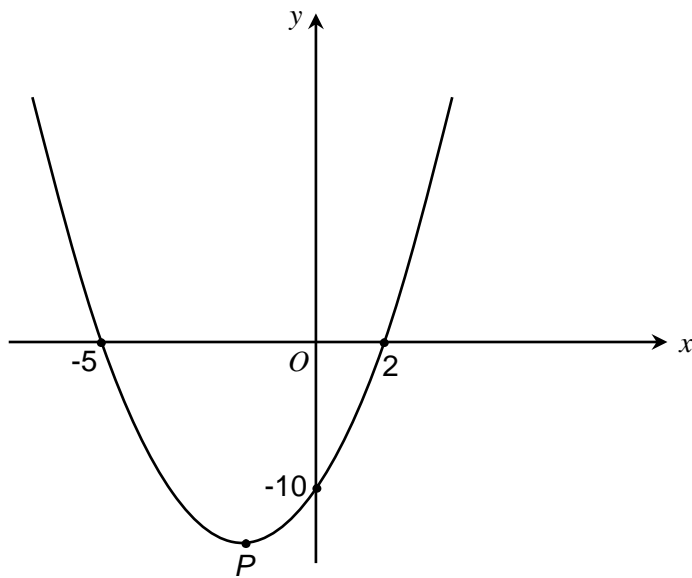
Answer _____ and _____

10 (b) Write down the equation of the line of symmetry of the graph. [1 mark]

Answer _____



11 Here is a sketch of the curve $y = x^2 + 3x - 10$



11 (a) Write down the roots of $x^2 + 3x - 10 = 0$ [1 mark]

Answer _____ and _____

11 (b) Write down the y -intercept of the curve. [1 mark]

Answer _____

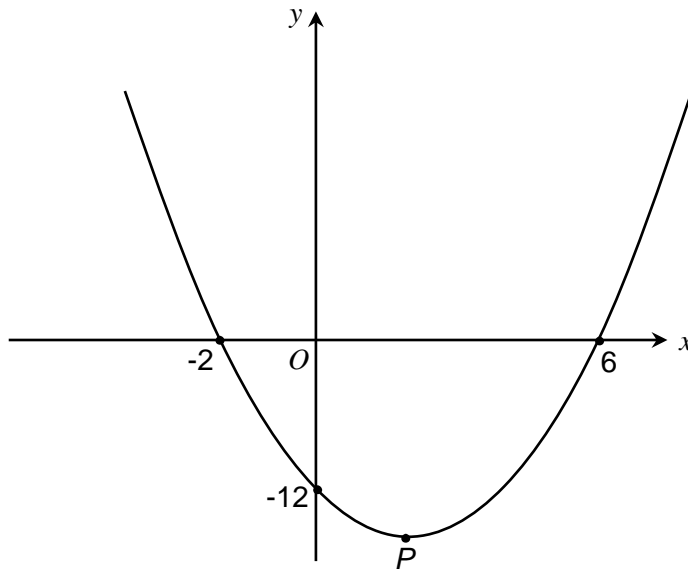
11 (c) Write down the x -coordinate of P , the turning point of the curve. [1 mark]

Answer _____





12 Here is a sketch of the curve $y = x^2 - 4x - 12$



12 (a) Write down the roots of $x^2 - 4x - 12 = 0$ [1 mark]

Answer _____ and _____

12 (b) Write down the y -intercept of the curve. [1 mark]

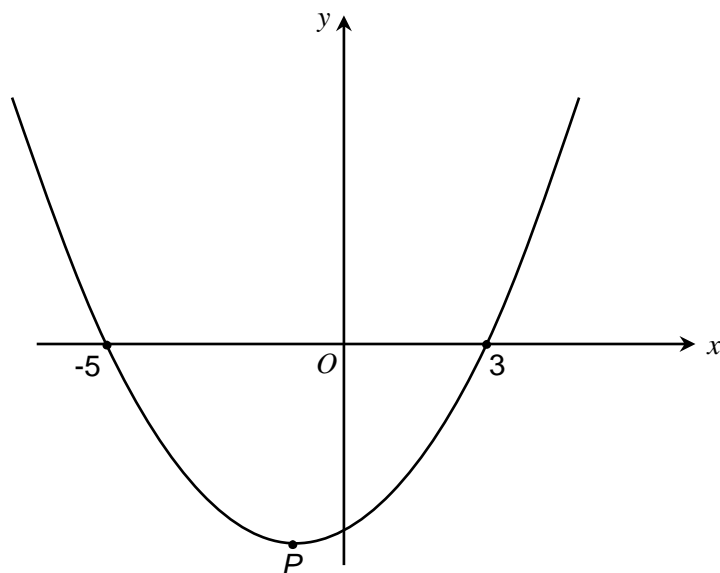
Answer _____

12 (c) Write down the equation of the line of symmetry of the curve. [1 mark]

Answer _____



13 Here is a sketch of the curve $y = x^2 + 2x - 15$



13 (a) Write down the roots of $x^2 + 2x - 15 = 0$ [1 mark]

Answer _____ and _____

13 (b) Write down the y-intercept of the curve. [1 mark]

Answer _____

13 (c) Work out the coordinates of P , the turning point of the curve. [2 marks]

Answer (_____ , _____)

$\frac{7}{7}$

