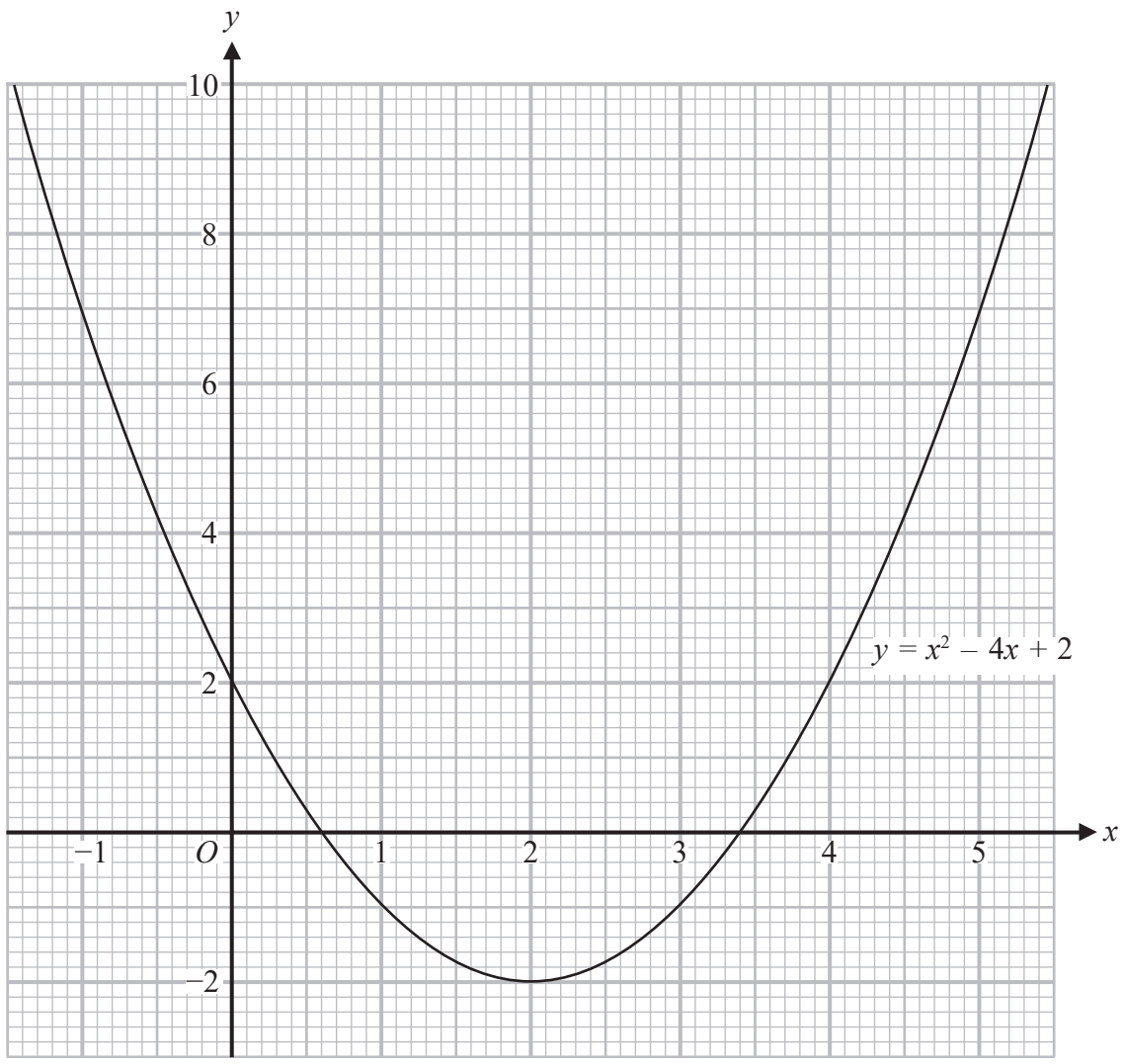
1



(b) Use this graph to find estimates for the solutions of the quadratic equation $x^2 - 4x + 2 = 0$

.....

(2)

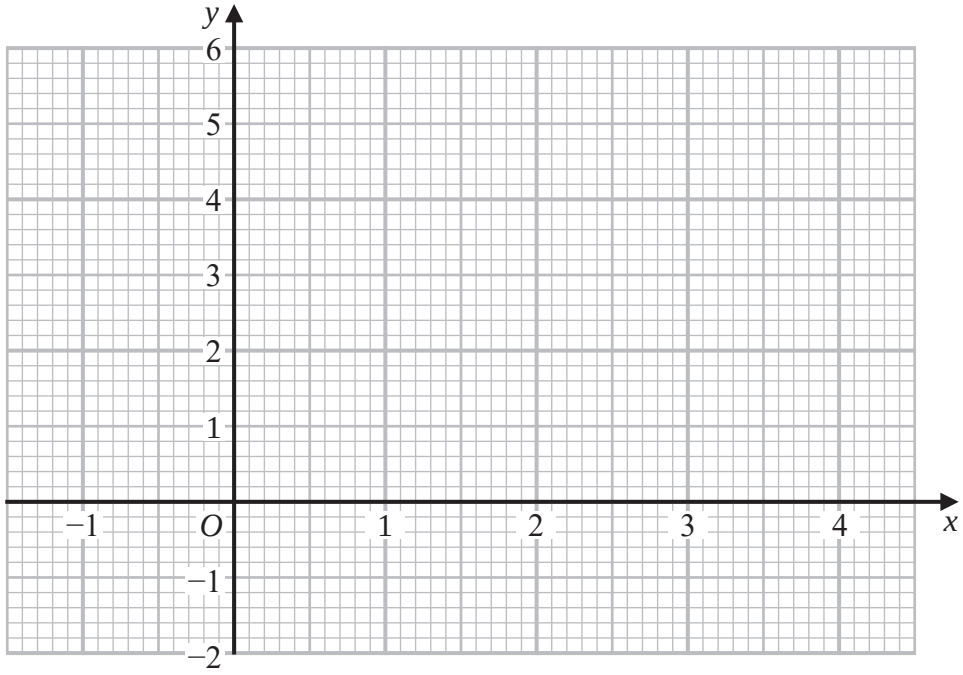
(Total for Question 1 is 2 marks)

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

x	−1	0	1	2	3	4
y		1	−1			

(2)

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



(2)

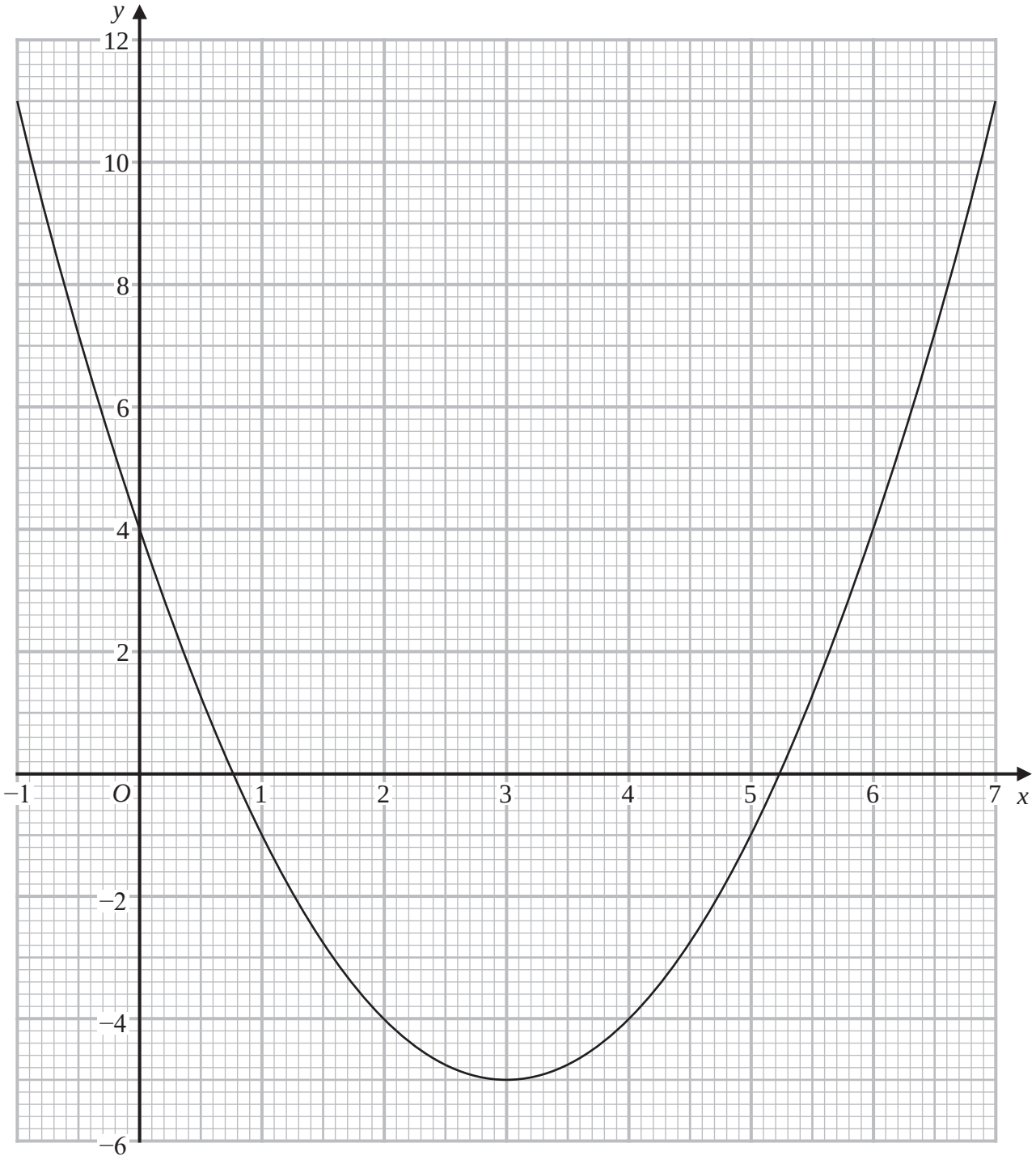
(c) Using your graph, find estimates for the solutions of the equation $x^2 - 3x + 1 = 0$

.....

(2)

(Total for Question 2 is 6 marks)

3 Here is the graph of $y = x^2 - 6x + 4$



(a) Write down the y intercept of the graph of $y = x^2 - 6x + 4$

.....

(1)

(b) Write down the coordinates of the turning point of the graph of $y = x^2 - 6x + 4$

(..... , ...)

(1)

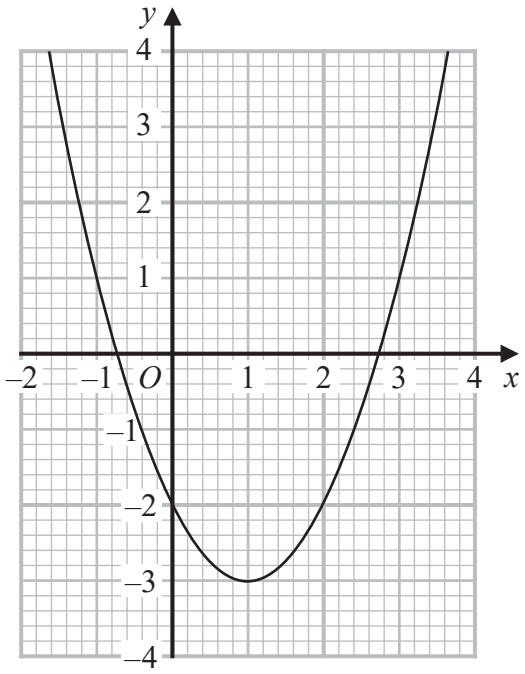
(c) Use the graph to find estimates for the roots of $x^2 - 6x + 4 = 0$

.....

(2)

(Total for Question 3 is 4 marks)

4 Here is the graph of $y = x^2 - 2x - 2$



(a) Write down the coordinates of the turning point on the graph of $y = x^2 - 2x - 2$

(..... , ...)

(1)

(b) Write down an estimate for one of the roots of $x^2 - 2x - 2 = 0$

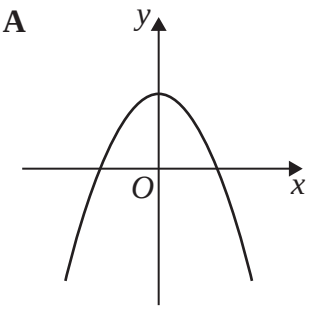
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(1)

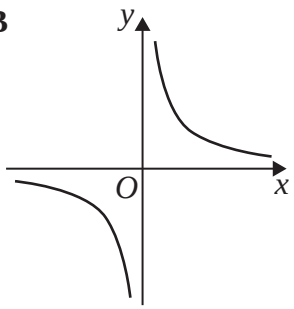
(Total for Question 4 is 2 marks)

5 Here are some graphs.

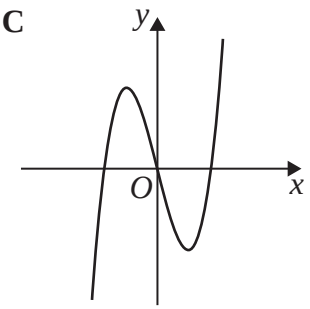
A



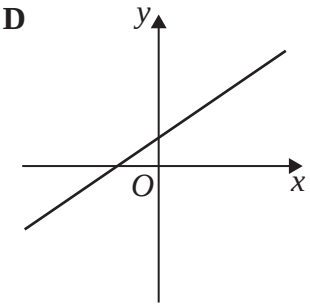
B



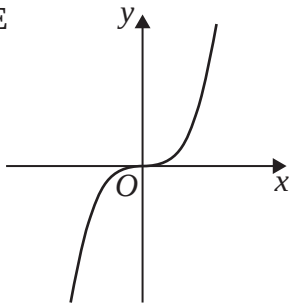
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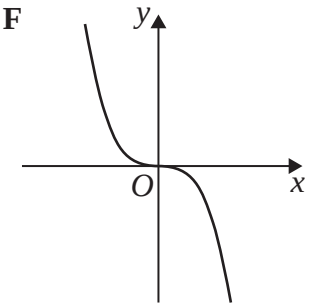
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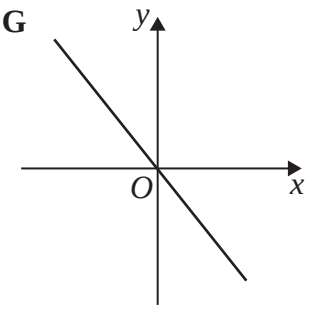
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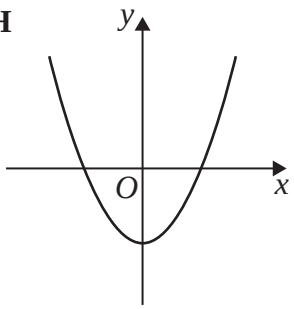
F



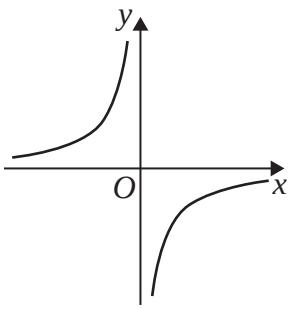
G



H



J



Write down the letter of the graph that could have the equation

(i) $y = x^2 - 4$

.....

(1)

(ii) $y = -x^3$

.....

(1)

(iii) $y = -\frac{5}{x}$

.....

(1)

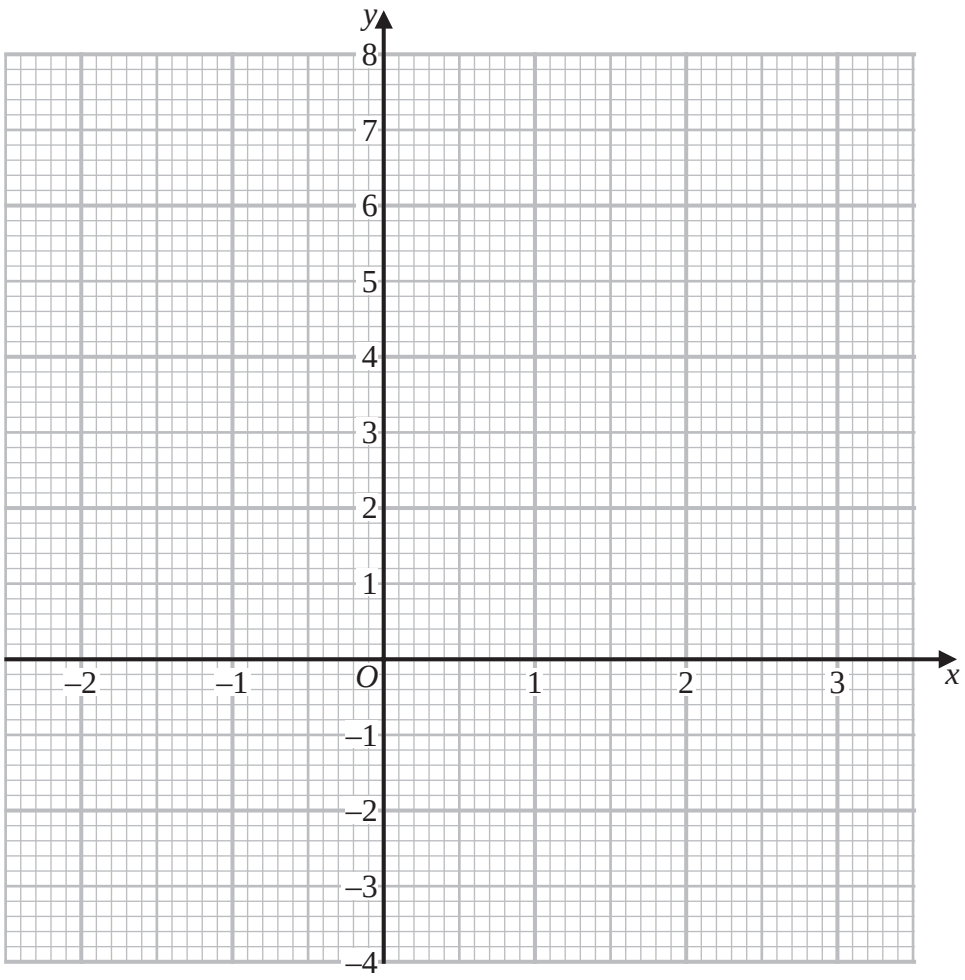
(Total for Question 5 is 3 marks)

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

x	–2	–1	0	1	2	3
y	6		0		2	

(2)

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



(2)

(c) Use your graph to find estimates for the solutions of the equation $x^2 - x = 4$

.....

(2)

(Total for Question 6 is 6 marks)