

Plotting Quadratic and Cubic Graphs 21 marks

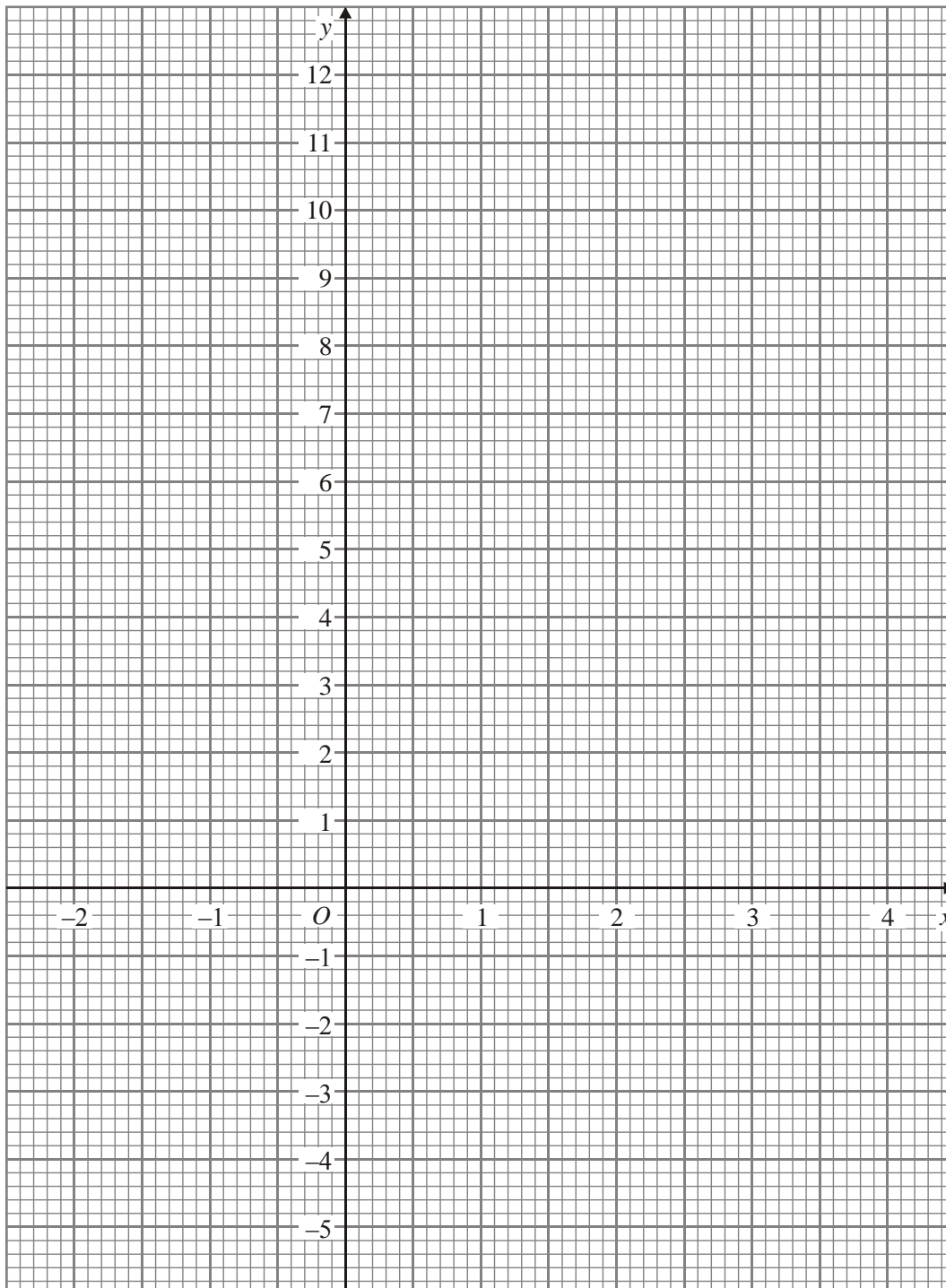
1. (a) Complete the table for $y = x^2 - 3x + 1$

x	-2	-1	0	1	2	3	4
y	11		1	-1		1	5

(2)

(b) On the grid, draw the graph of $y = x^2 - 3x + 1$

(2)



(c) Use your graph to find an estimate for the minimum value of y .

$y = \dots\dots\dots$

(1)

(d) Use a graphical method to find estimates of the solutions to the equation

$$x^2 - 3x + 1 = 2x - 4$$

$x = \dots\dots\dots$ or $x = \dots\dots\dots$

(3)

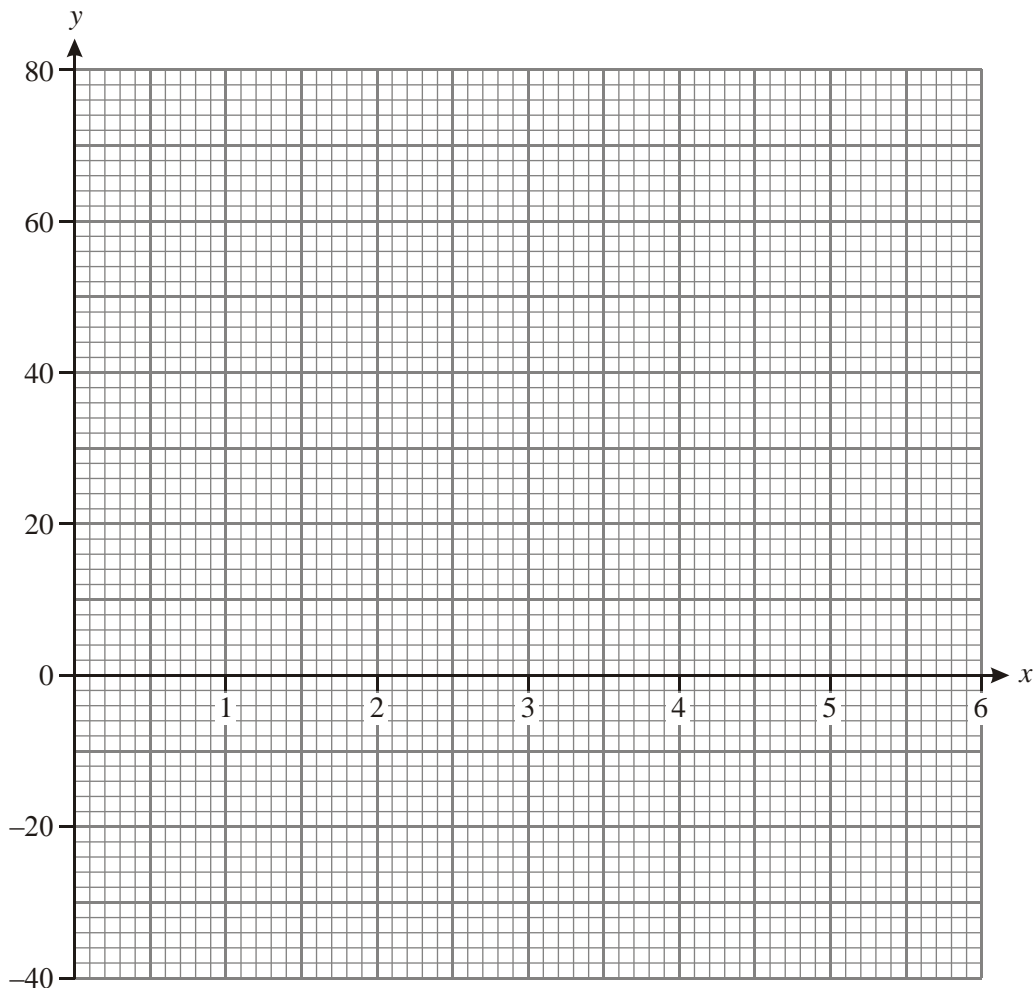
(Total 8 marks)

2. (a) Complete the table of values for the graph of $y = 4x(11 - 2x)$

x	0	1	2	3	4	5	6
y	0			60			-24

(2)

(b) On the grid, draw the graph of $y = 4x(11 - 2x)$



(2)

(c) Use your graph to find the maximum value of y .

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(1)

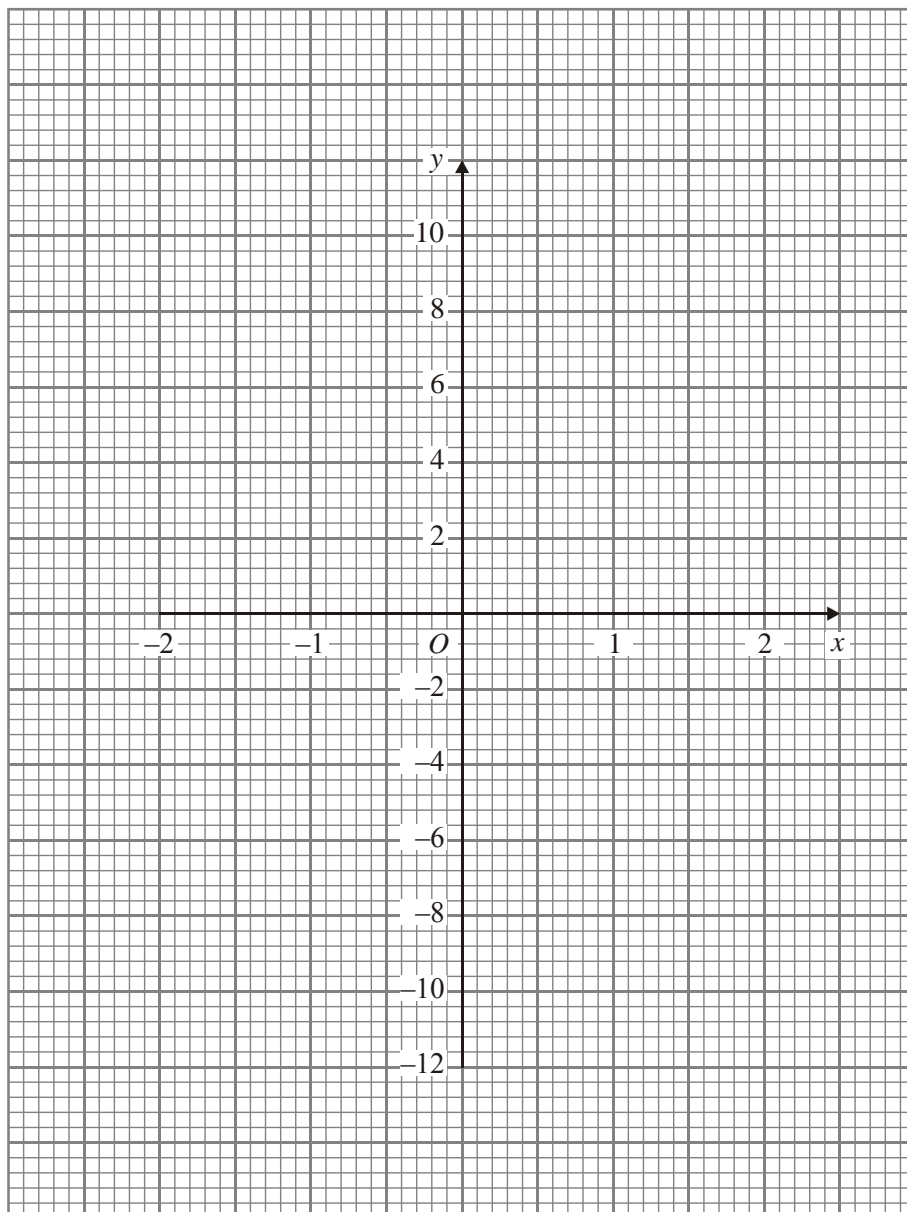
(Total 5 marks)

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

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

(3)

(b) On the grid, draw the graph of $y = x^3 + x - 2$



(2)

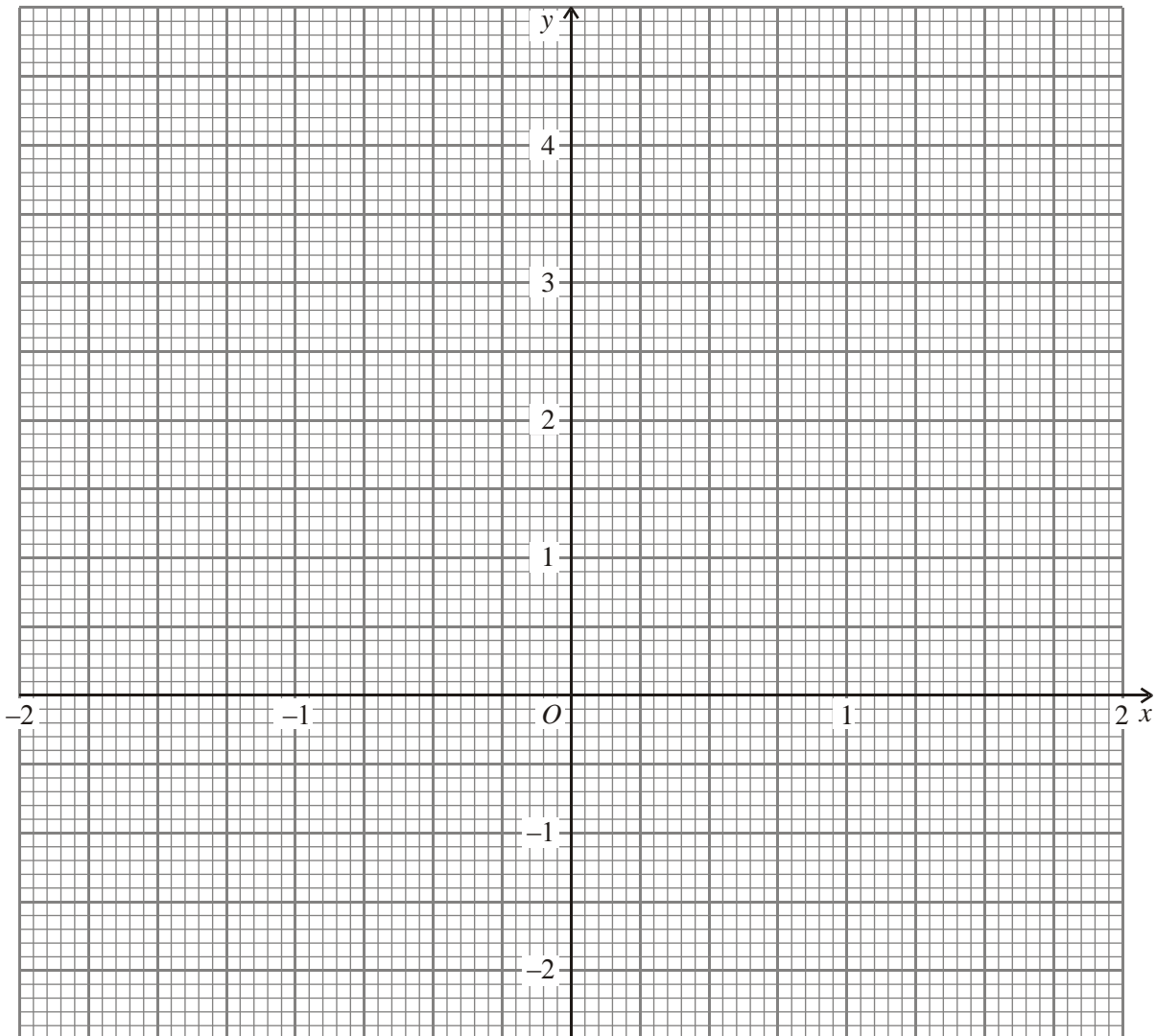
(Total 5 marks)

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

x	-2	-1.5	-1	-0.5	0	0.5	1	1.5	2
y	-1		3	2.375	1	-0.375		-0.125	3

(1)

- (b) On the grid, draw the graph of $y = x^3 - 3x + 1$ for $-2 \leq x \leq 2$



(2)

(Total 3 marks)