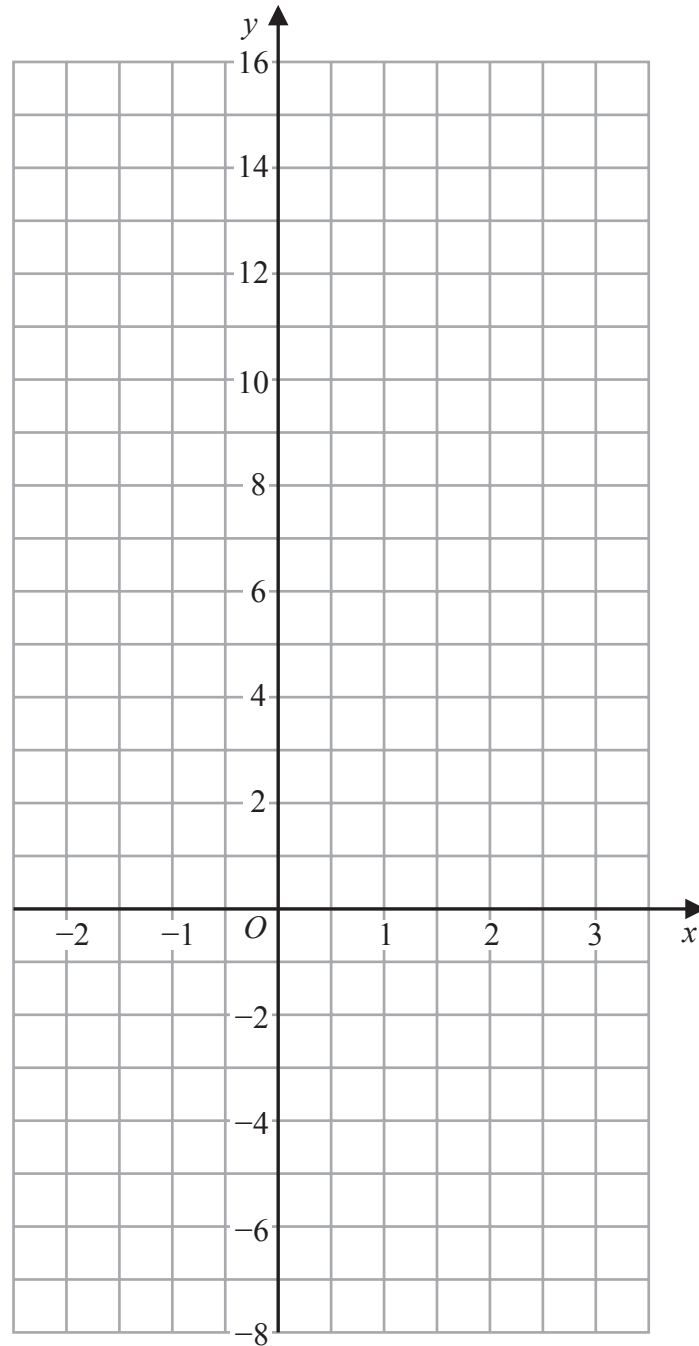


1

On the grid, draw the graph of $y = 7 - 4x$ for values of x from -2 to 3



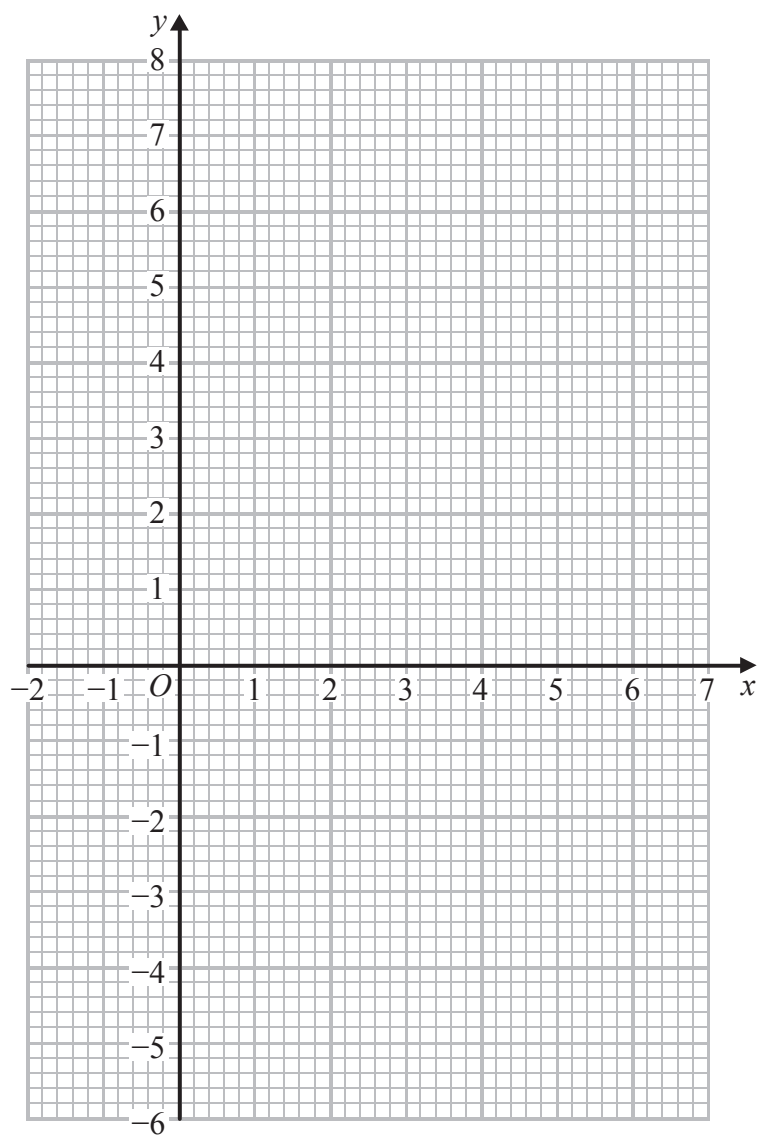
(Total for Question 1 is 3 marks)

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

x	-1	0	1	2	3	4	5	6
y		1		7	7		1	

(2)

(b) On the grid, draw the graph of $y = 1 + 5x - x^2$ for values of x from -1 to 6



(2)

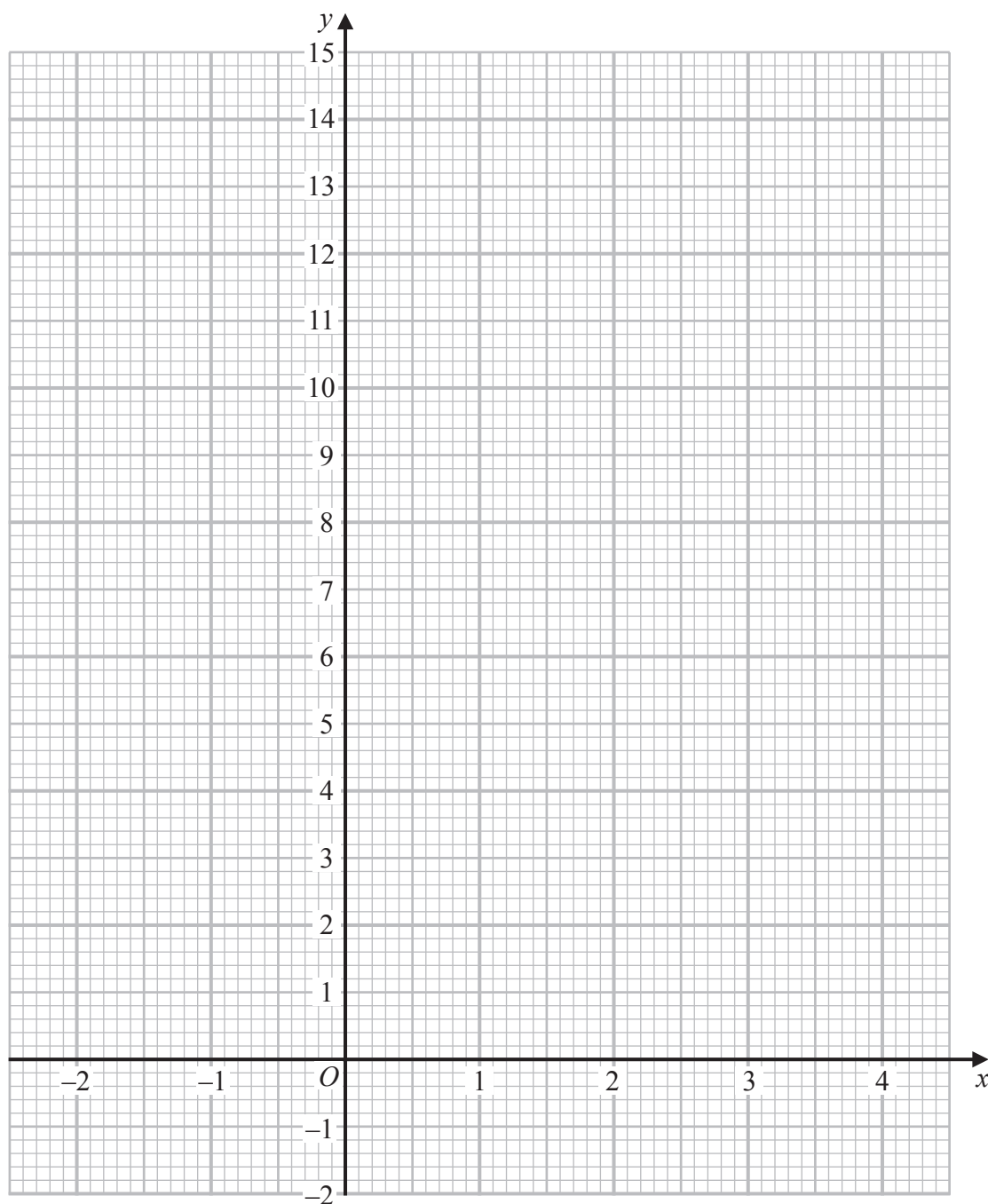
(Total for Question 2 is 4 marks)

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

x	-2	-1	0	1	2	3	4
y		8	3			0	

(2)

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



(2)

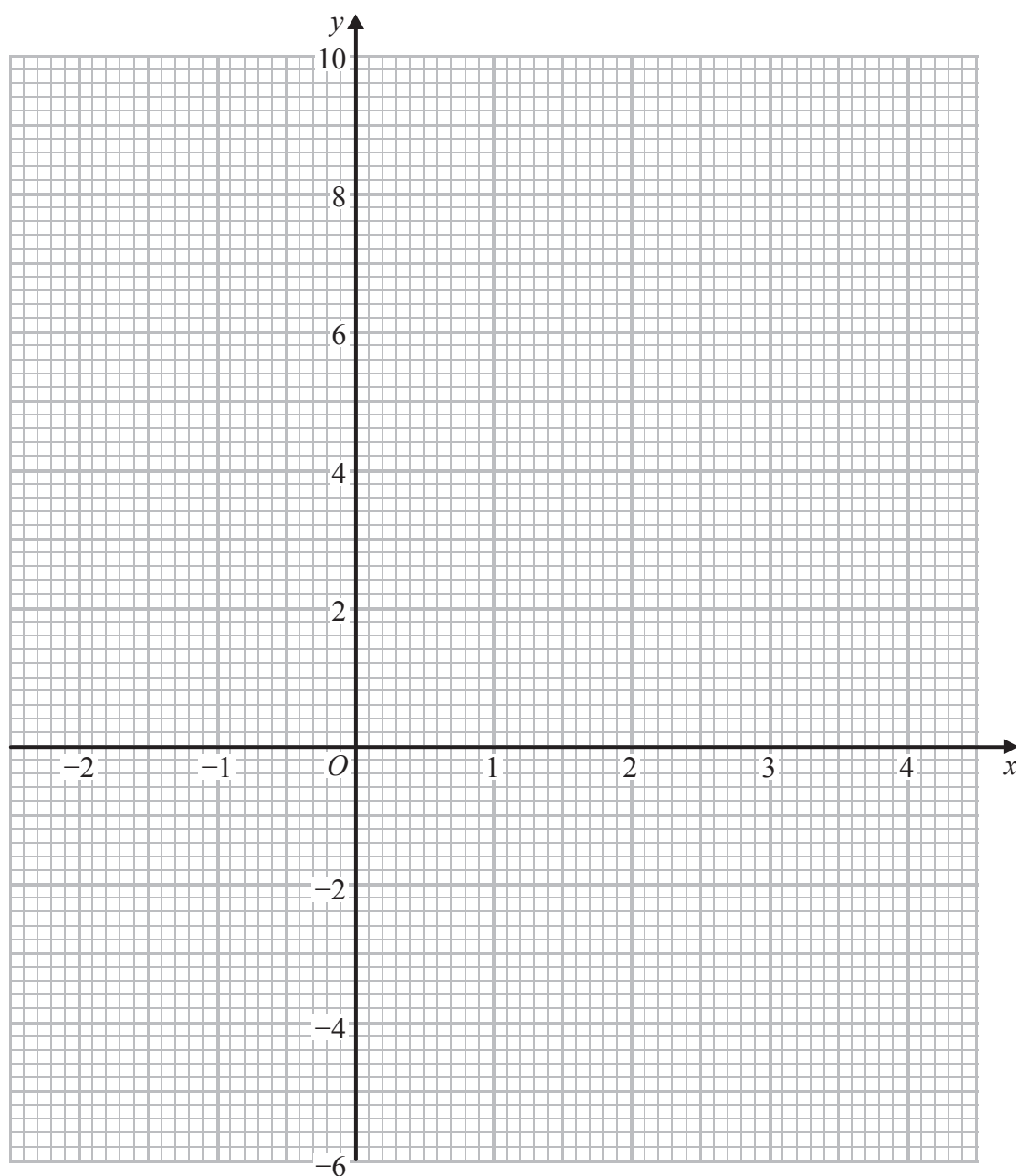
(Total for Question 3 is 4 marks)

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

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

(2)

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



(2)

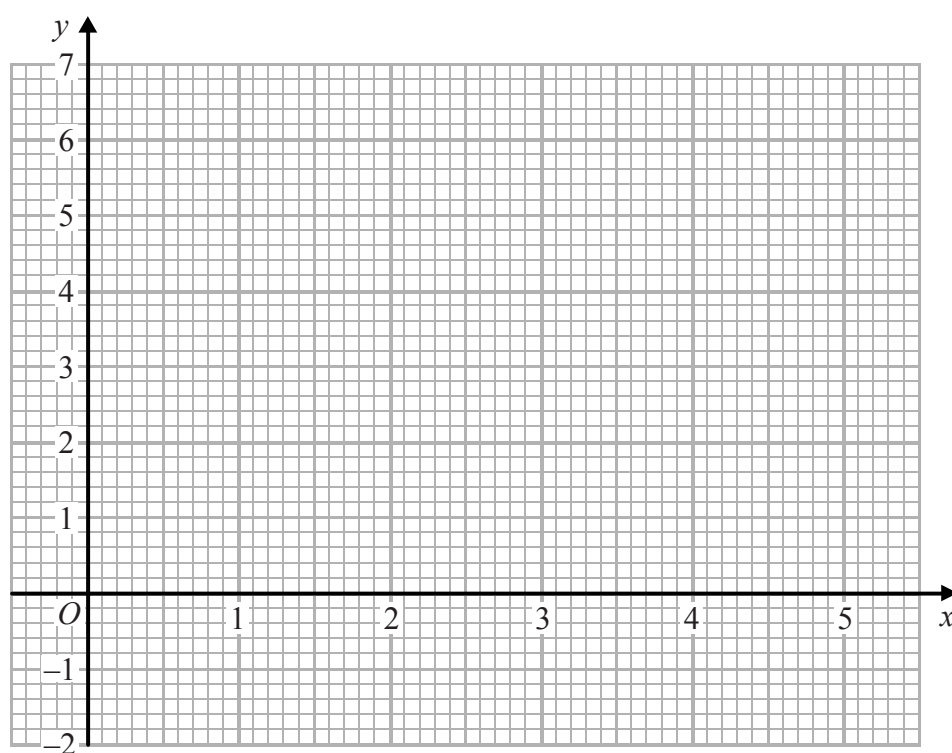
(Total for Question 4 is 4 marks)

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

x	0	1	2	3	4	5
y	6		0	0	2	

(1)

- (b) On the grid, draw the graph of $y = x^2 - 5x + 6$ for $0 \leq x \leq 5$



(2)

- (c) By drawing a suitable straight line on the grid, find estimates for the solutions of the equation

$$x^2 - 5x = x - 7$$

(3)

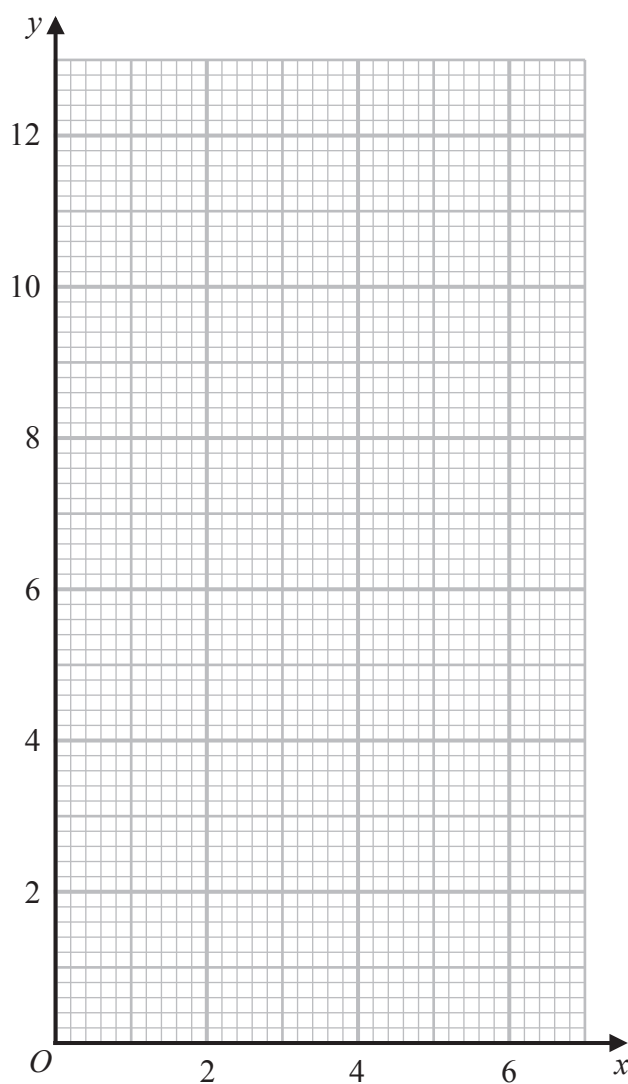
(Total for Question 5 is 6 marks)

- 6 (a) Complete the table of values for $y = \frac{6}{x}$

x	0.5	1	2	3	4	5	6
y		6		2			1

(2)

- (b) On the grid, draw the graph of $y = \frac{6}{x}$ for $0.5 \leq x \leq 6$



(2)

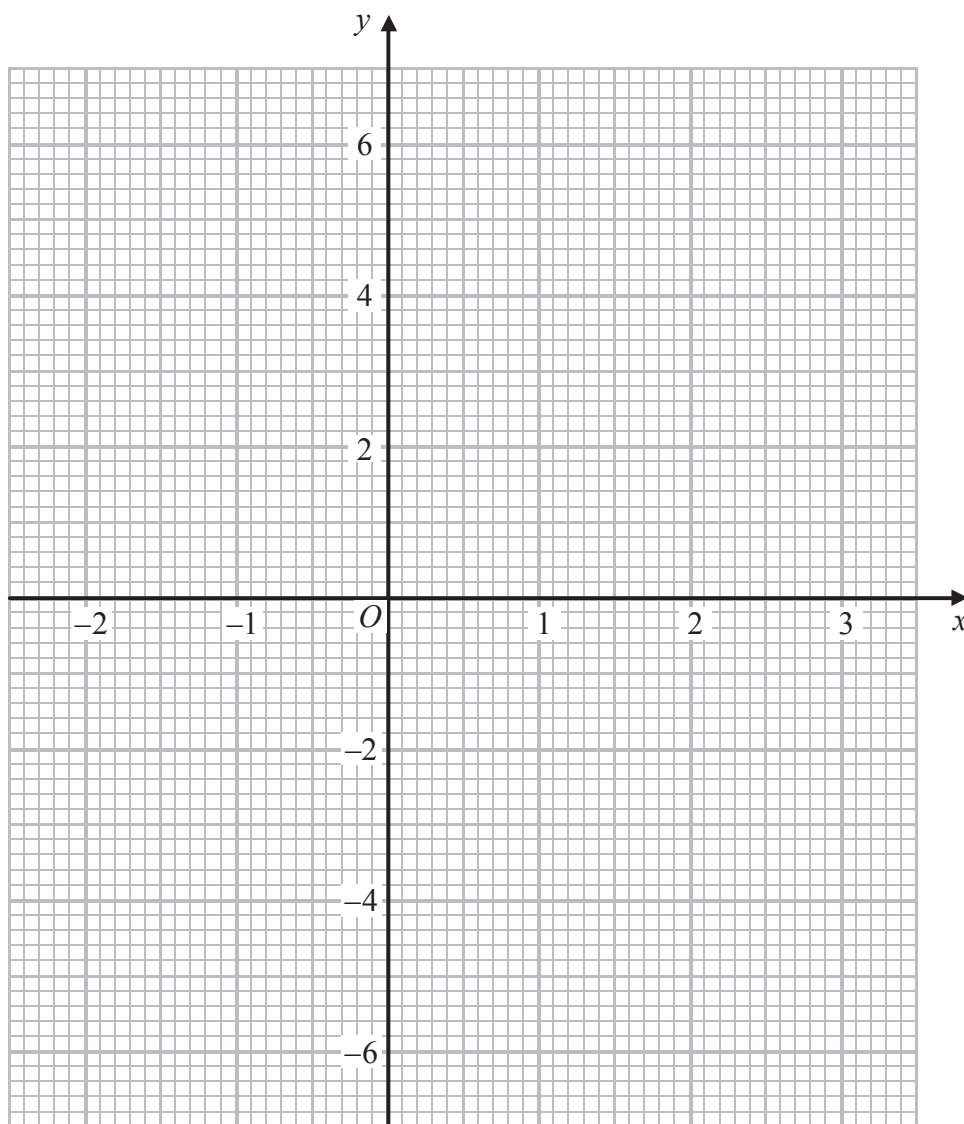
(Total for Question 6 is 4 marks)

7 (a) Complete the table of values for $y = x^3 - 2x^2 - 3x + 4$

x	-2	-1	-0.5	0	1	1.5	2	3
y			4.875	4		-1.625		

(2)

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



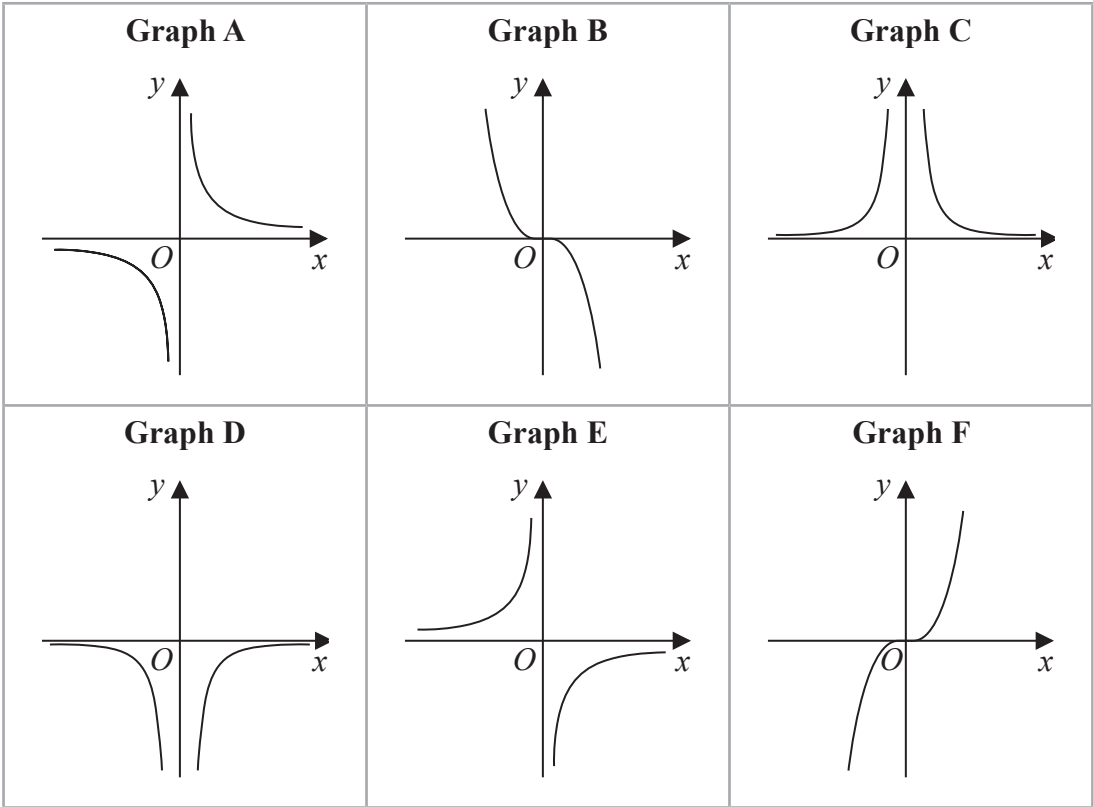
(2)

- (c) By drawing a suitable straight line on the grid,
find estimates for the solutions of the equation $x^3 - 2x^2 - x + 1 = 0$
Give your solutions correct to 1 decimal place.

.....
(4)

(Total for Question 7 is 8 marks)

8 Here are six graphs.



Complete the table below with the letter of the graph that could represent each given equation.

Write your answers on the dotted lines.

Equation	Graph
$y = \frac{2}{x^2}$
$y = -\frac{1}{2}x^3$
$y = -\frac{5}{x}$

(Total for Question 8 is 3 marks)

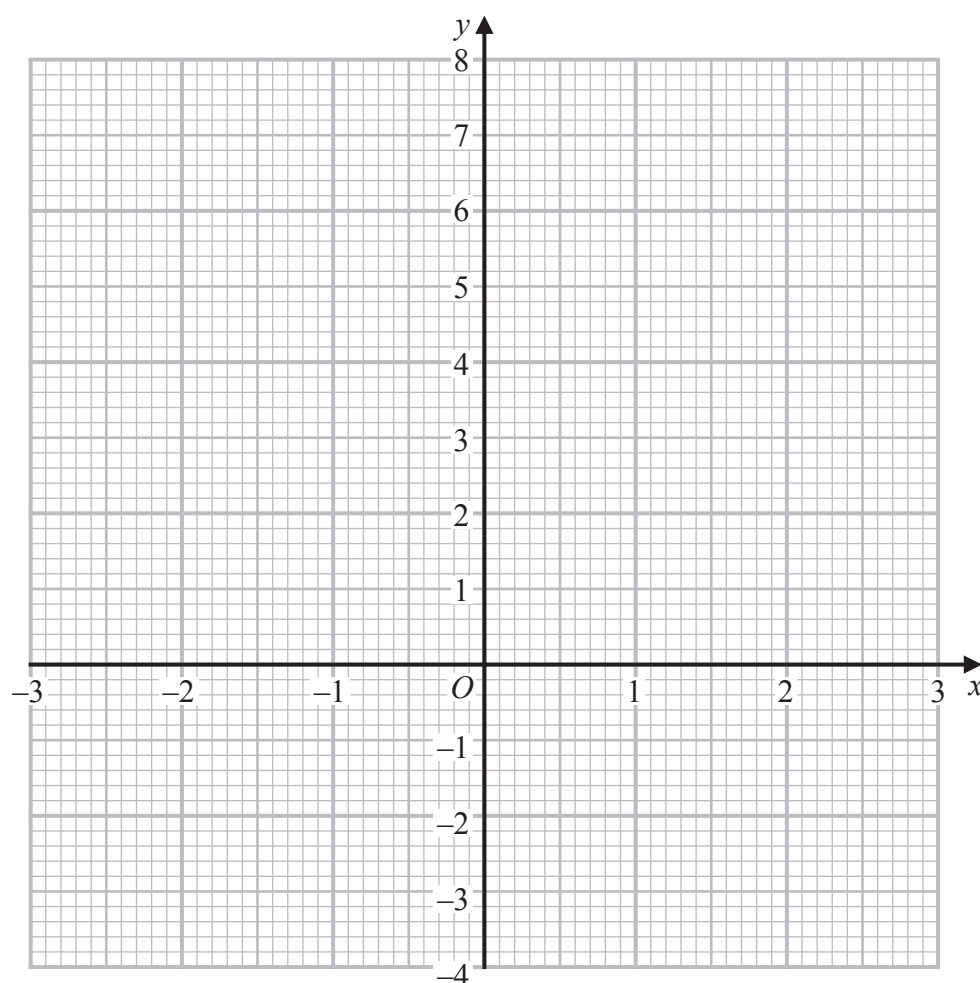
9

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

x	-3	-2	-1	0	1	2	3
y	7.5				-2.5		4.5

(2)

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



(2)

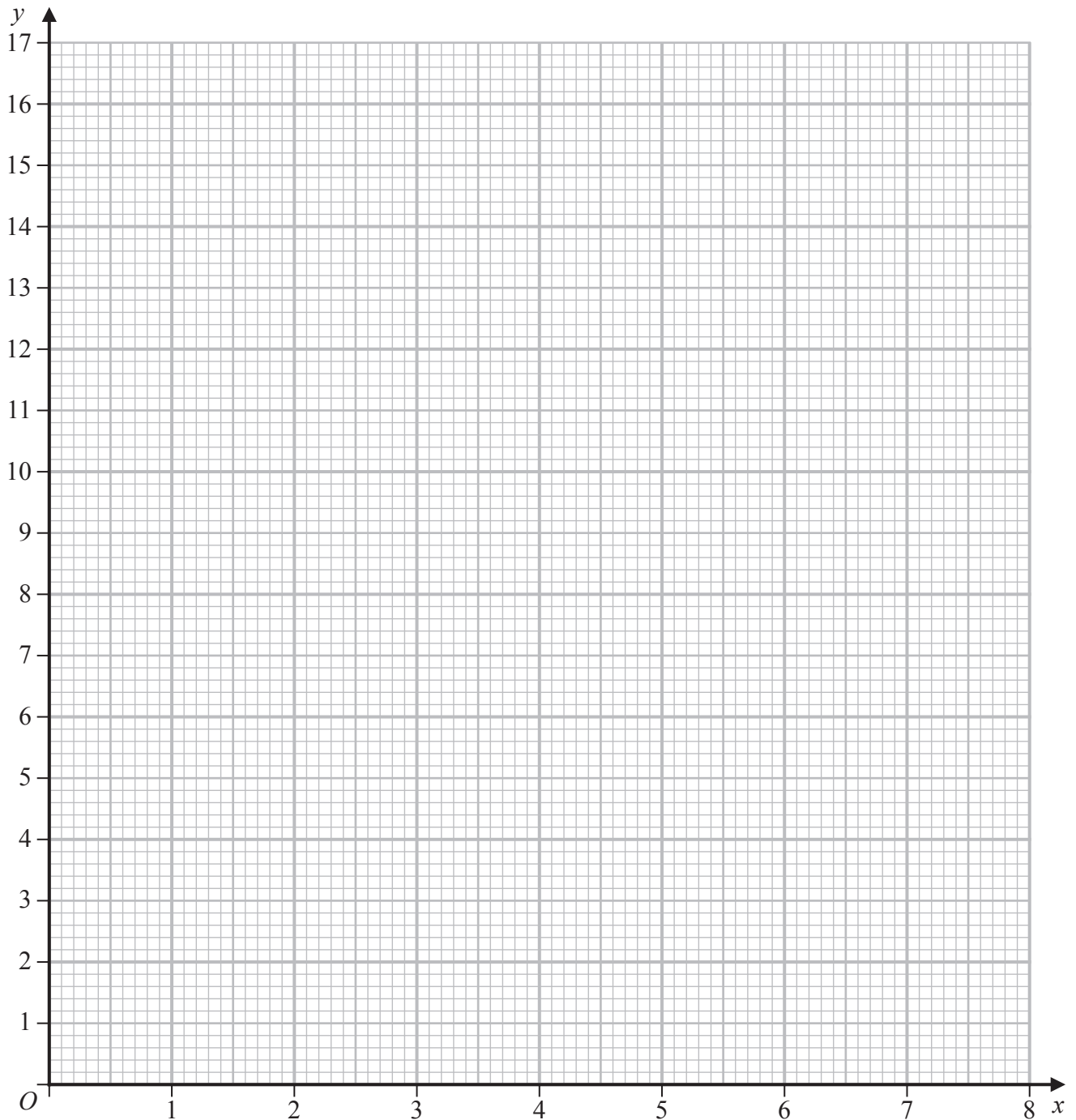
(Total for Question 9 is 4 marks)

10 (a) Complete the table of values for $y = \frac{1}{x}(x^2 + 4)$

x	0.25	0.5	1	2	4	8
y	16.25					8.5

(b) On the grid, draw the graph of $y = \frac{1}{x}(x^2 + 4)$ for $0.25 \leq x \leq 8$

(2)

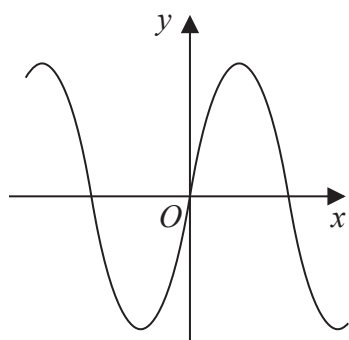


(2)

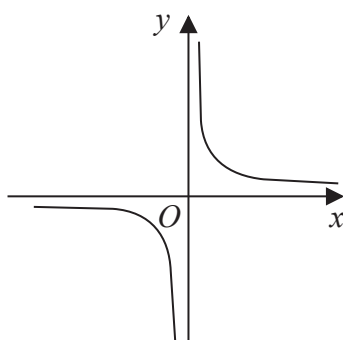
(Total for Question 10 is 4 marks)

11 Here are nine graphs.

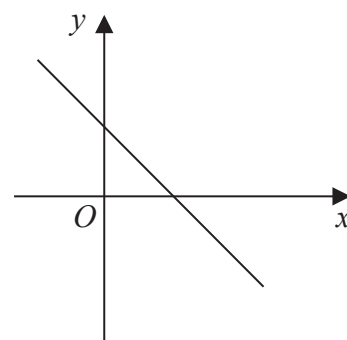
Graph A



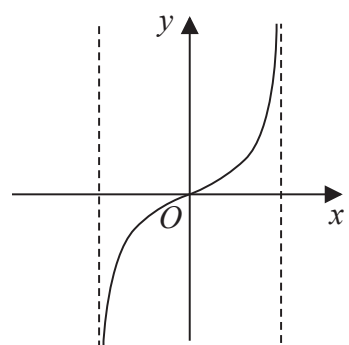
Graph B



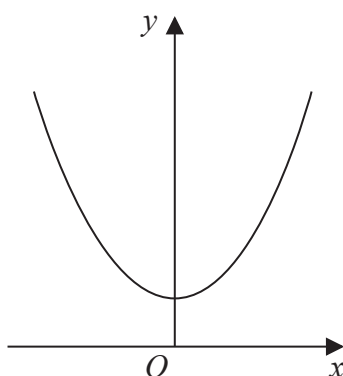
Graph C



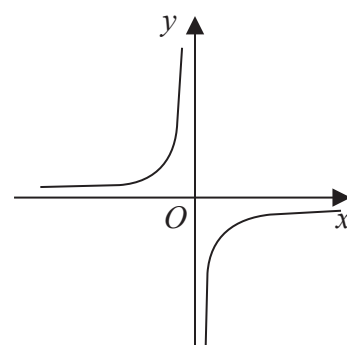
Graph D



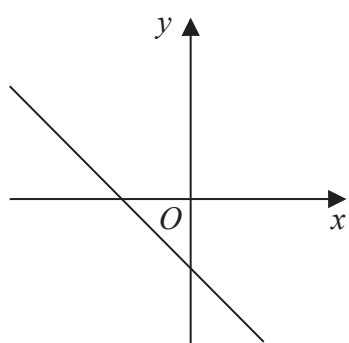
Graph E



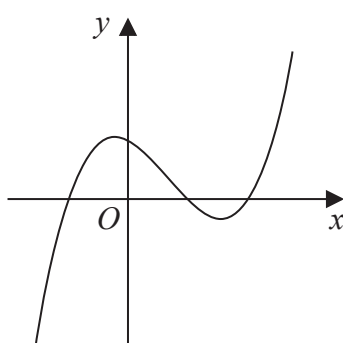
Graph F



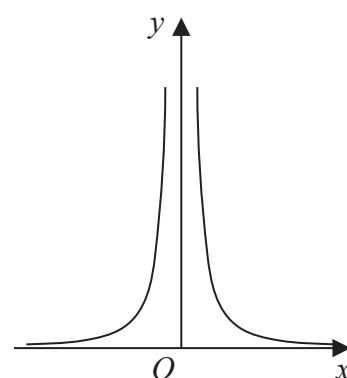
Graph G



Graph H



Graph I



Complete the table below with the letter of the graph that could represent each given equation.
Write each answer on the dotted line.

Equation	Graph
$y = -2x + 3$
$y = -\frac{1}{x}$
$y = \tan x^\circ$
$y = (x + 1)(x - 1)(x - 2)$

(Total for Question 11 is 3 marks)

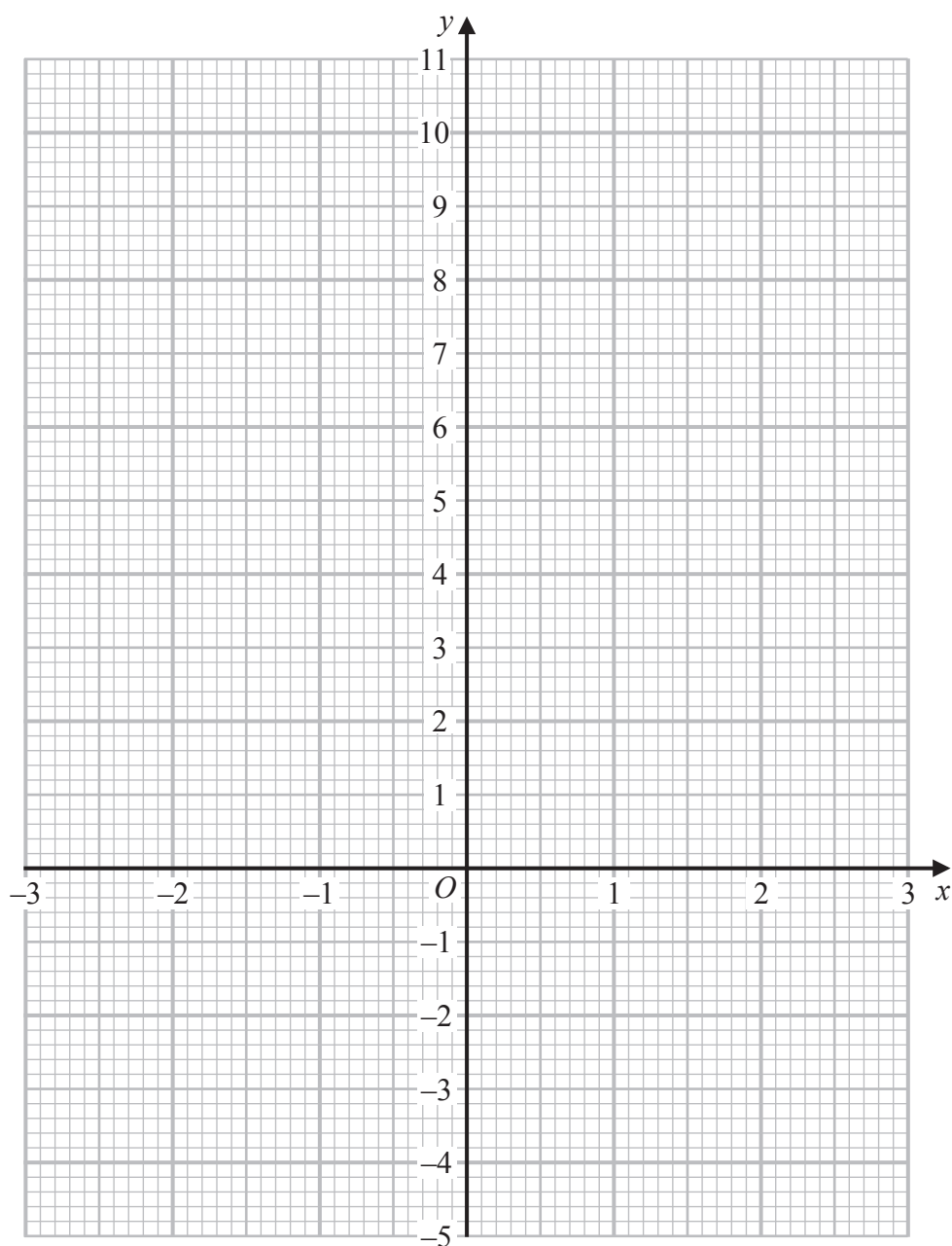
12

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

x	-3	-2	-1	0	1	2	3
y	-4.5			3		3	

(2)

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



(2)

(c) By drawing a suitable straight line on the grid, find an estimate for the solution of the equation $\frac{1}{2}x^3 - x + 4 = 0$

$x = \dots\dots\dots$
(2)

(Total for Question 12 is 6 marks)