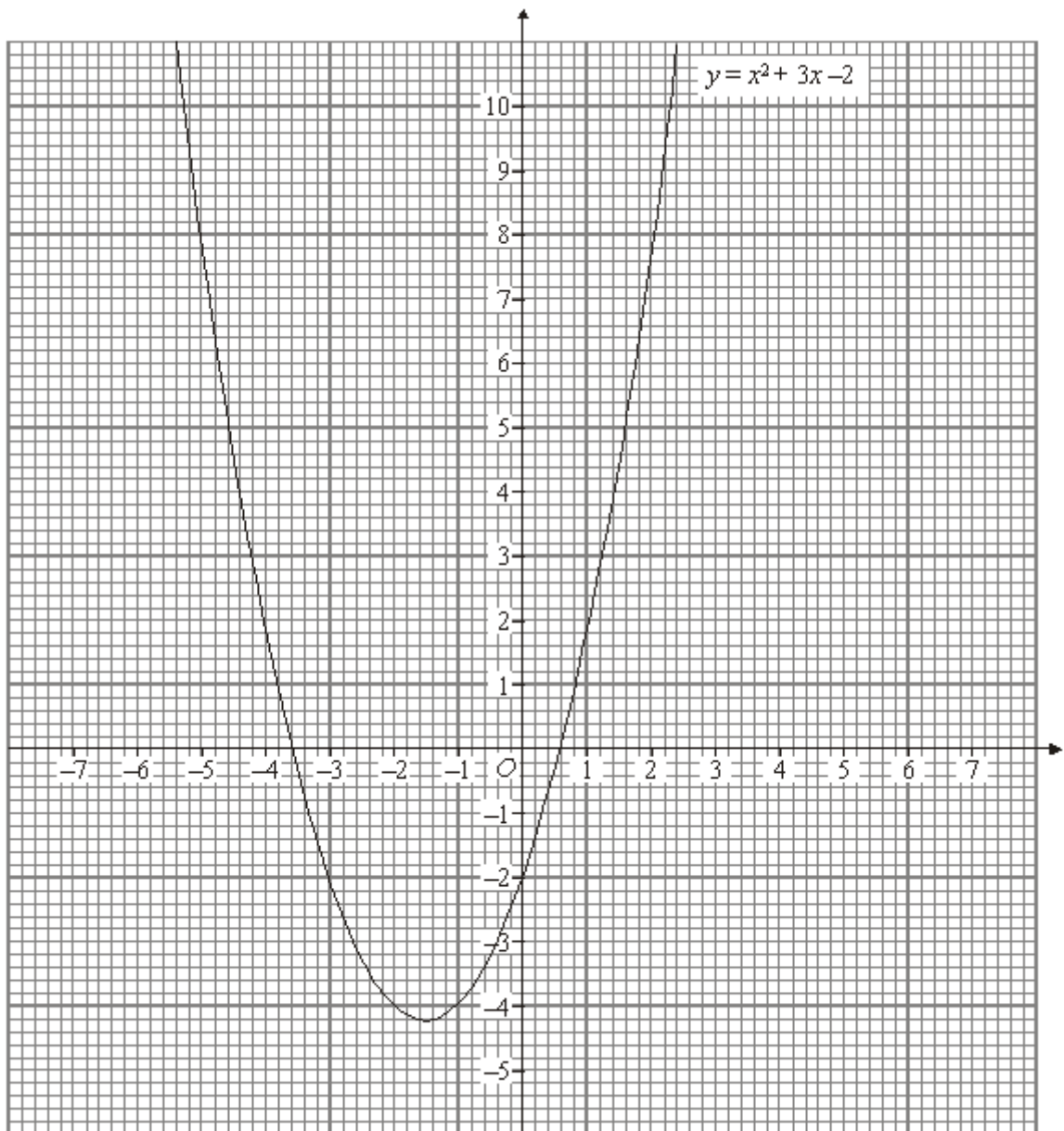


The grid below shows the graph of  $y = x^2 + 3x - 2$



(a) By drawing an appropriate straight line on the graph solve the equation

$$x^2 + 3x - 3 = 0..$$

Answer .....

(2)

(b) By drawing an appropriate straight line on the graph solve the equation

$$x^2 + 2x - 1 = 0$$

.....

.....

(a) Complete the table of values for  $y = 3x^2 - 6$

x	-3	-2	-1	0	1	2	3	4
y	21	6	-3	-6	-3		21	42

(1)

(b) On the grid below, draw the graph of  $y = 3x^2 - 6$  for values of  $x$  between  $-3$  and  $+4$ .



(2)

(c) Use your graph to write down the solutions of  $3x^2 - 6 = 0$

Answer ..... and .....

(d) By drawing an appropriate linear graph, write down the solutions of

$$3x^2 - 5x - 6 = 0$$

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Answer

3) (a) Show that  $\frac{4}{x} = 9 - 2x$  can be written as  $2x^2 - 9x + 4 = 0$

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(2)

(b) Part of the graph of  $y = \frac{4}{x}$  is shown on the grid below.

Draw a straight line on the grid which will enable you to solve the equation  
 $2x^2 - 9x + 4 = 0$

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(3)

(c) Hence, or otherwise, solve the equation  $2x^2 - 9x + 4 = 0$

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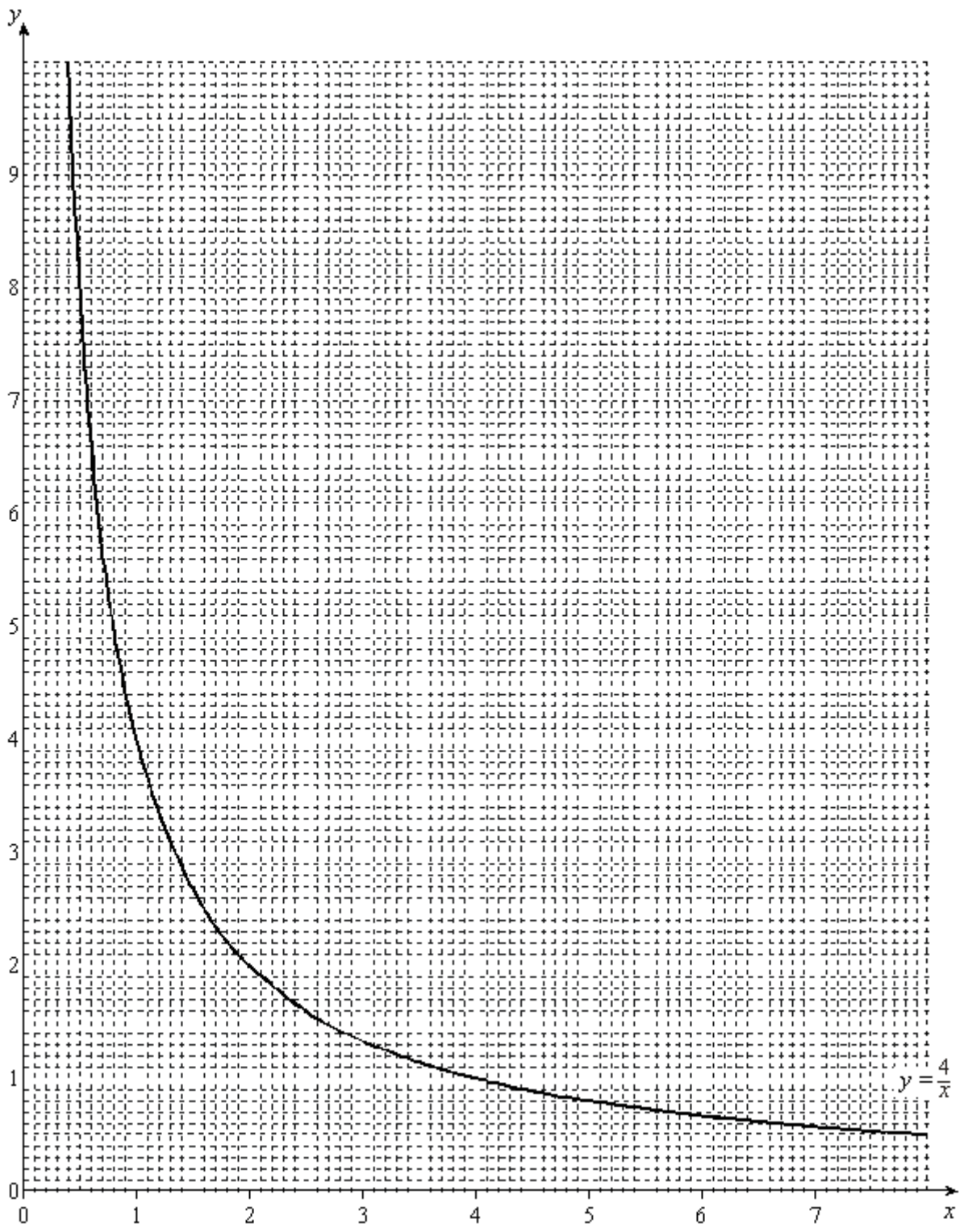
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Answer .....

(2)



(Total 7 marks)