

Quadratic Graphs Solving Equations IGCSE Questions

1. The curve drawn on the graph below has equation $y = x^2 - x - 6$

(a) On the same axes draw the line with equation $y = 2x - 1$ (1)

(b) Write down the coordinates of the point on the curve with gradient 2.

(2)

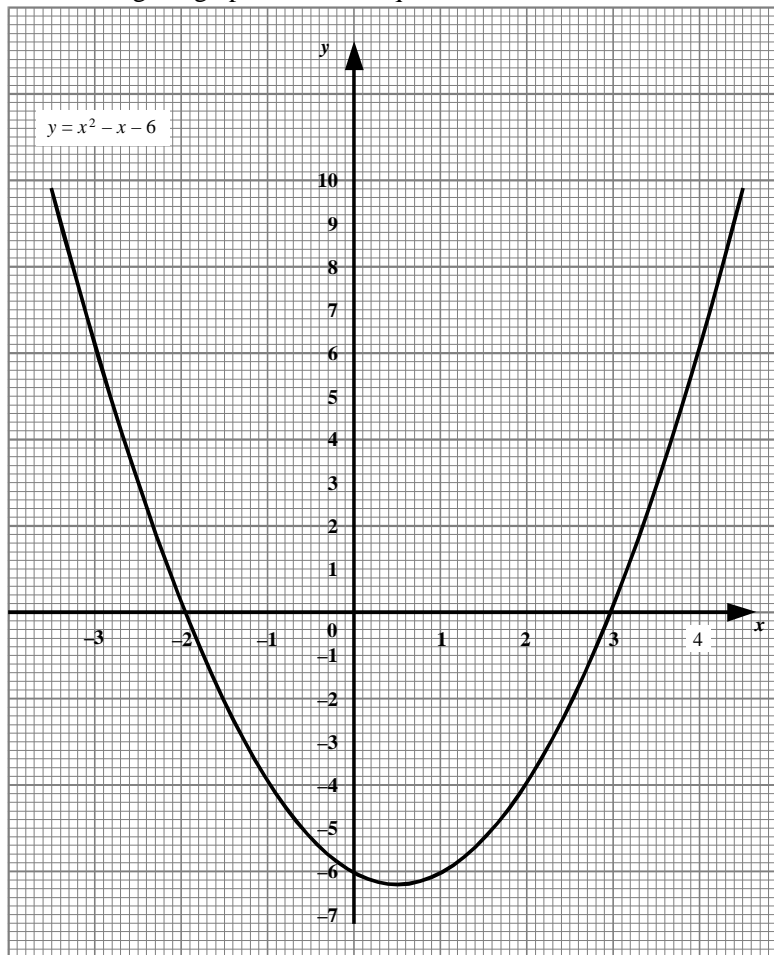
(c) (i) Show that $x^2 - x - 6 = 2x - 1$

is the same equation as $x^2 - 3x - 5 = 0$

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(1)

(ii) Hence, using the graph, solve the equation $x^2 - 3x - 5 = 0$



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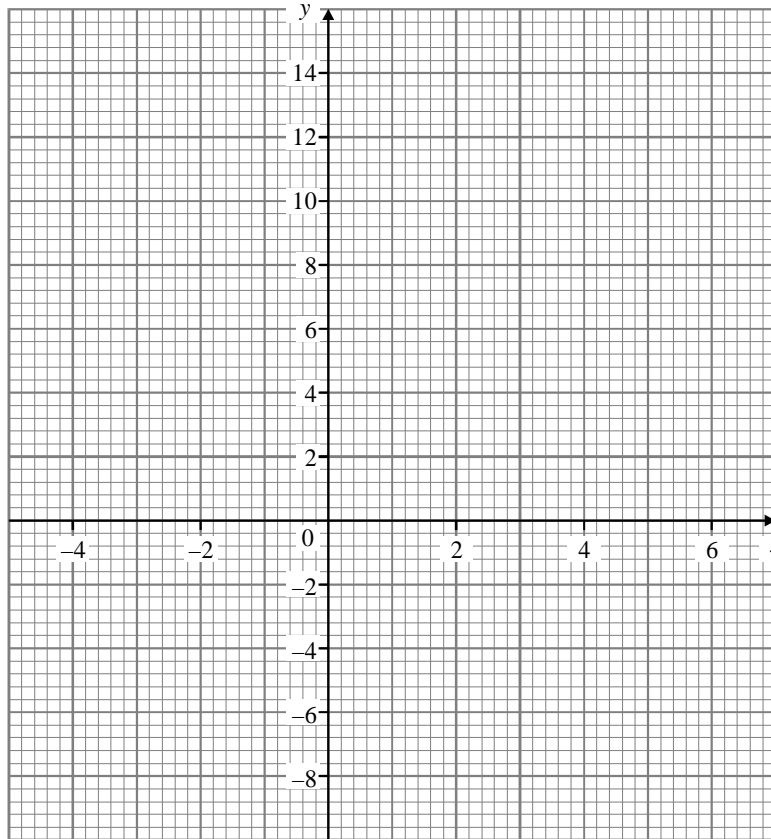
(2)

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

x	-3	-2	-1	0	1	2	3	4	5	6
y	14		0	-4	-6	-6		0	6	14

(2)

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



(2)

- (c) Write down the solutions of $x^2 - 3x - 4 = 0$

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(1)

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

$$x^2 - 4x - 1 = 0$$

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..... (3)