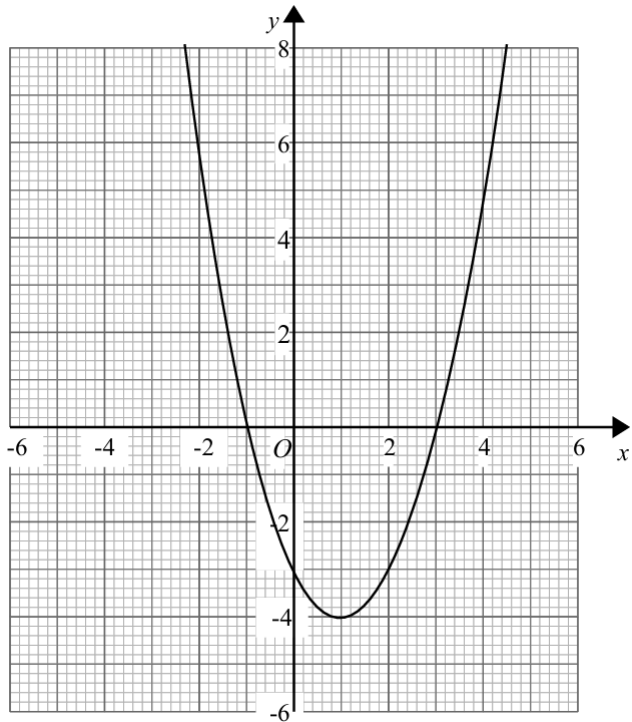
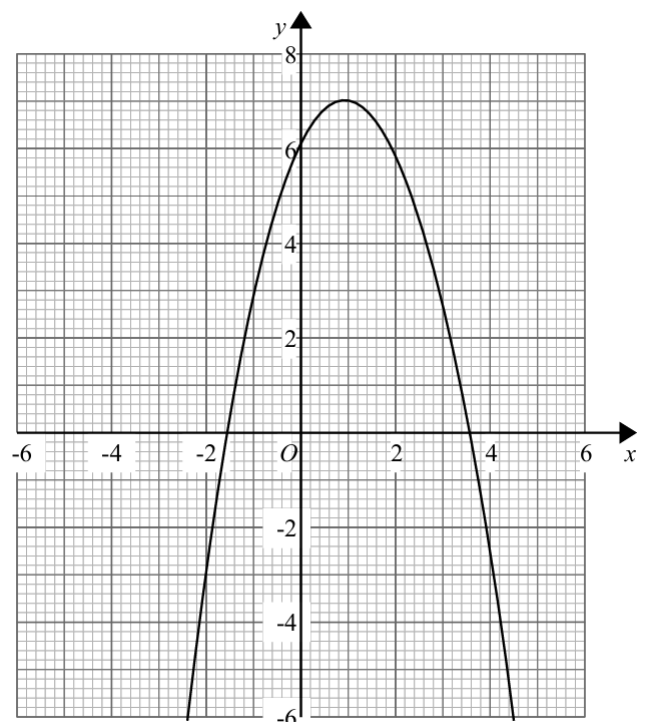


1 Here is the graph of  $y = x^2 - 2x - 3$



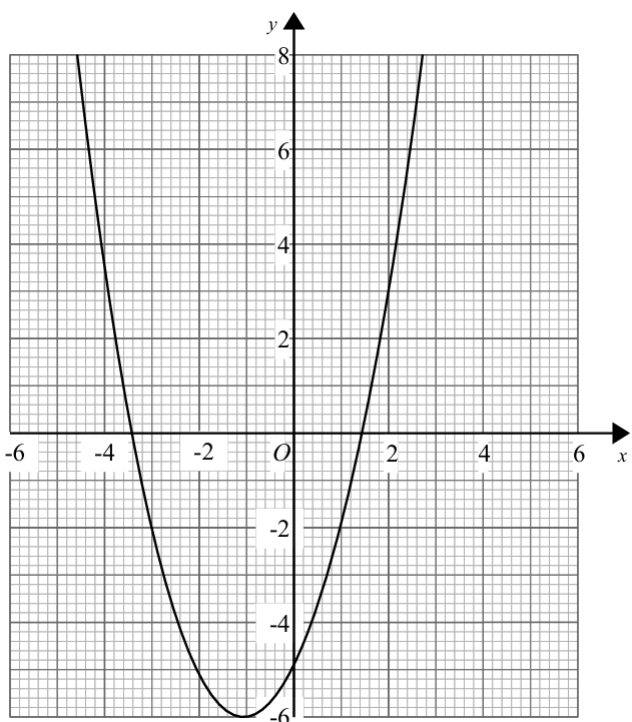
- (a) Write down the turning point of the graph
- (b) Use the graph to find the roots of the equation  $x^2 - 2x - 3 = 0$

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



- (a) Write down the turning point of the graph  $y = 2x + 6 - x^2$
- (b) Use the graph to find the roots of the equation  $x^2 = 2x + 6$

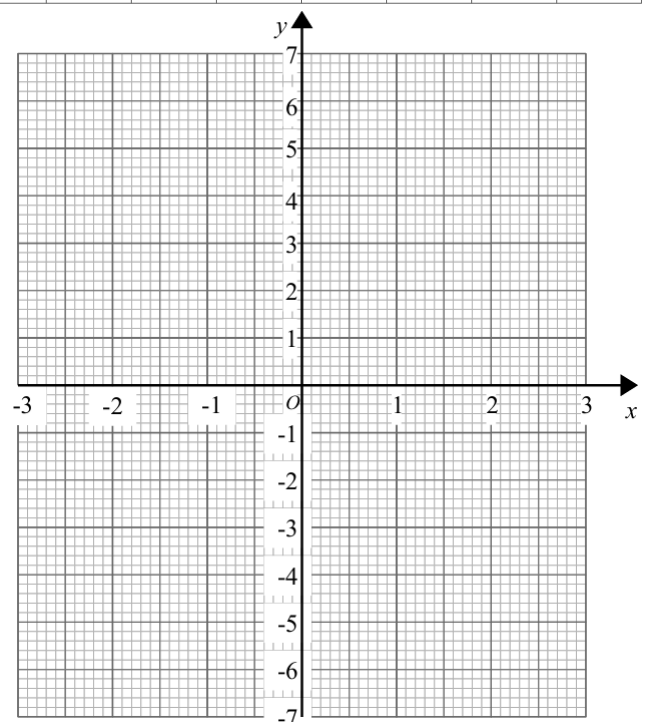
3 Here is the graph of  $y = x^2 + 2x - 5$



- (a) Write down the turning point of the graph  $y = x^2 + 2x - 5$
- (b) Use the graph to find the roots of the equation  $x^2 + 2x - 5 = 2$

4 Complete the table of values for  $y = x^2 + x - 6$

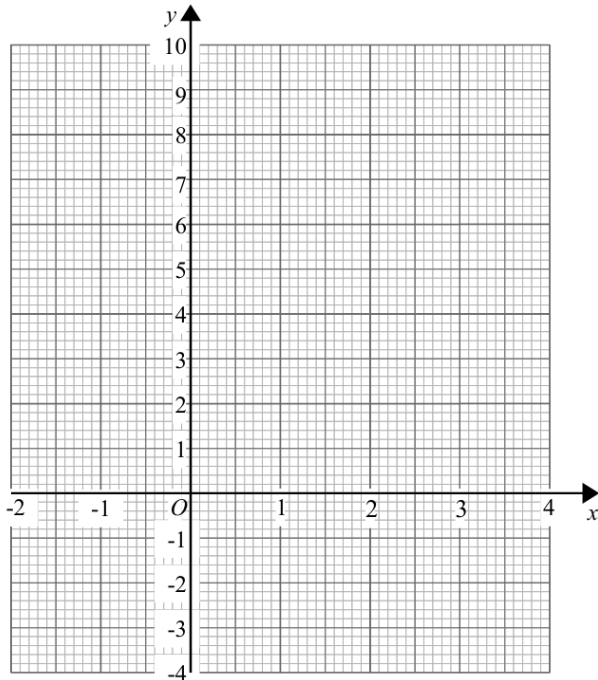
$x$	-3	-2	-1	0	1	2	3
$y$				-6		0	



- (a) On the grid draw the graph of  $y = x^2 + x - 6$
- (b) Use the graph to find estimates of the solutions to the equation  $x^2 + x - 6 = -2$

5 Complete the table of values for  $y = x^2 - 3x - 1$

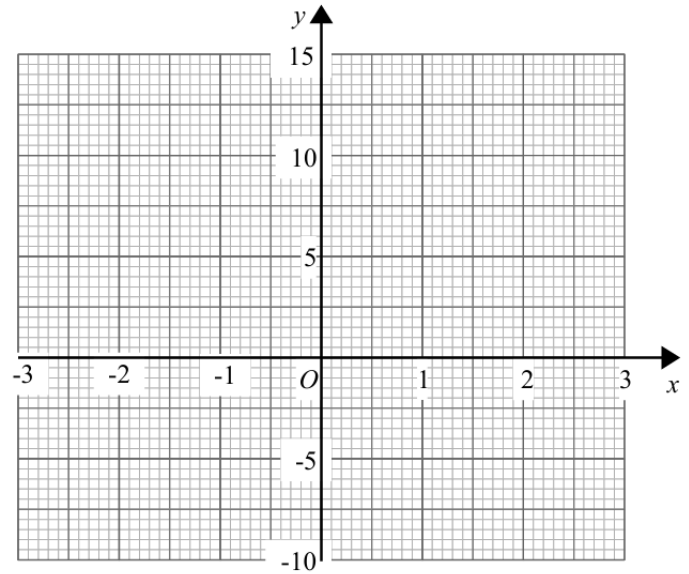
$x$	-2	-1	0	1	2	3	4
$y$							



- (a) On the grid draw the graph of  $y = x^2 - 3x - 1$
- (b) Use the graph to find an estimate of the turning point of the graph  $y = x^2 - 3x - 1$

6 Complete the table of values for  $y = x^2 - 2x - 5$

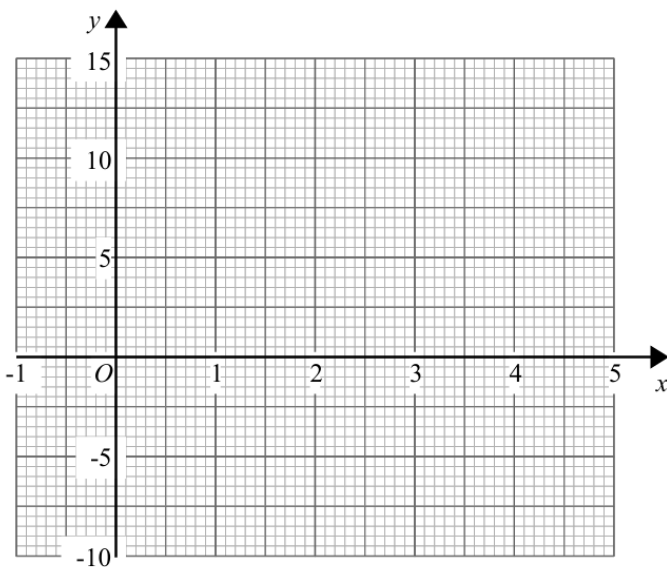
$x$	-3	-2	-1	0	1	2	3
$y$							



- (a) On the grid draw the graph of  $y = x^2 - 2x - 5$
- (b) Use the graph to find an estimate of a solution to the equation  $x^2 = 2x + 5$

7 Complete the table of values for  $y = 7x - x^2$

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



- (a) On the grid draw the graph of  $y = 7x - x^2$
- (b) Use the graph to find an estimate of the turning point of the graph  $y = 7x - x^2$
- (c) Find the solutions to the equation  $7x - x^2 = 0$