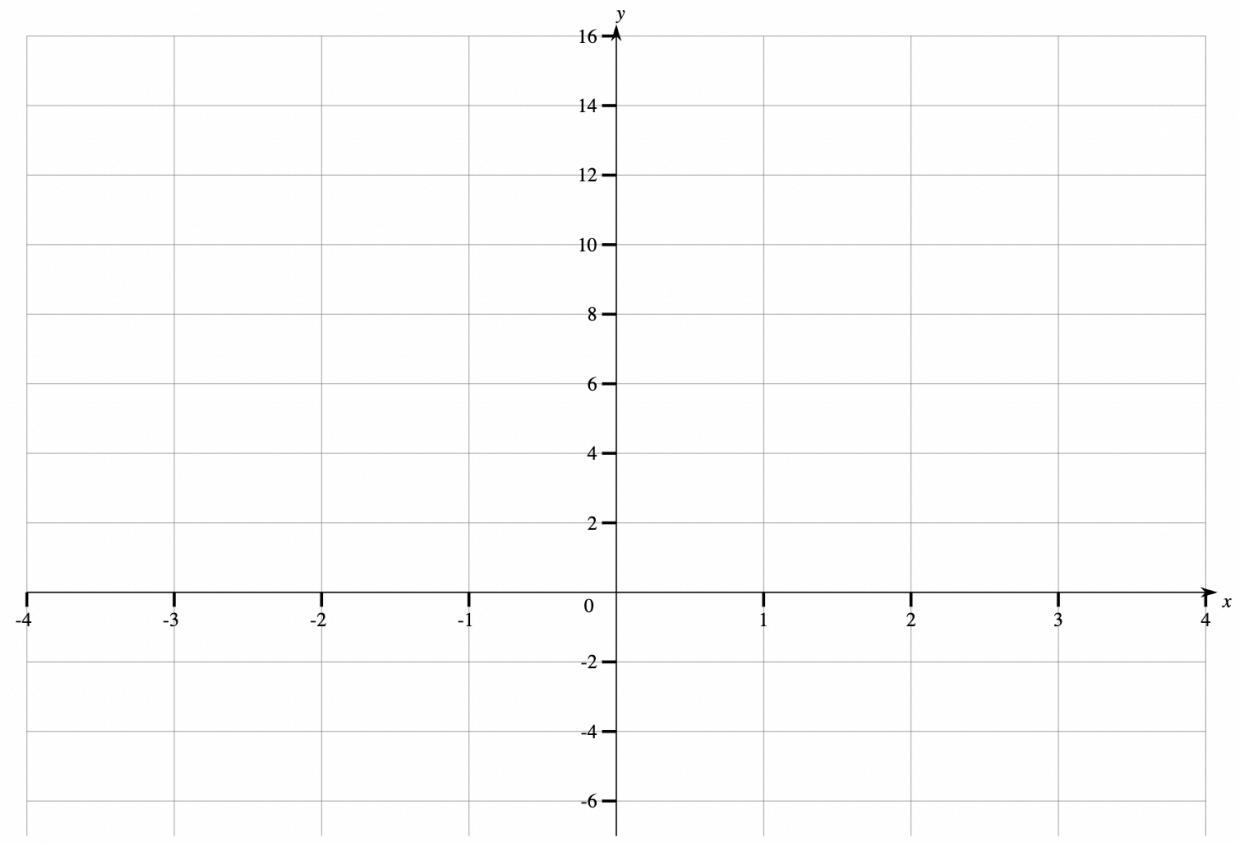
Graphs of Quadratics

Exam Style Questions

1. (a) Sketch the graph of $y = x^2 + x - 6$ for $x = -4$ to $x = 4$.



(3)

(b) Estimate the turning point of the graph $y = x^2 + x - 6$

..... (1)

(c) Using the graph, write down the roots of $x^2 + x - 6 = 0$

..... (1)

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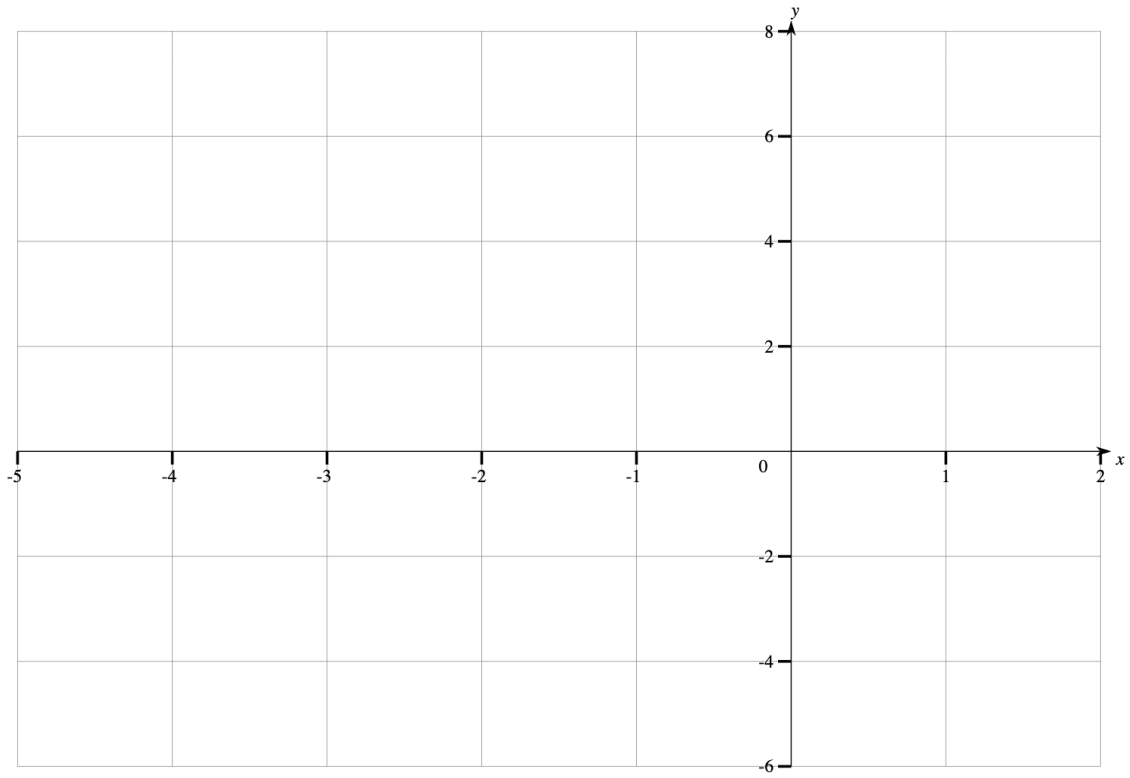
2. (a) Sketch the graph of $y = -x^2 - 3x + 4$ for $x = -5$ to $x = 2$.



(3)

(b) Estimate the turning point of the graph $y = -x^2 - 3x + 4$

..... (1)

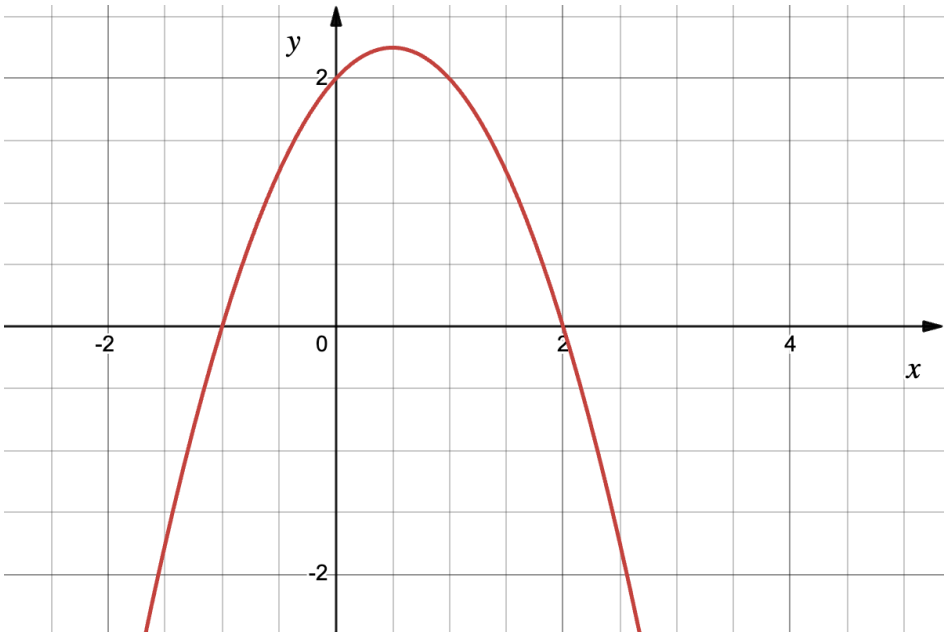
(c) Using the graph, write down the roots of $-x^2 - 3x + 4 = 0$

..... (1)

(d) Using the graph, write down the roots of $-x^2 - 3x + 4 = 2$

..... (1)

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



(b) Estimate the turning point of the graph $y = -x^2 + x + 2$

..... (1)

(c) Using the graph, write down the roots of $-x^2 + x + 2 = 0$

..... (1)

(d) Using the graph, estimate the roots of $-x^2 - 3x + 4 = -1$

..... (1)

(e) Using the graph, estimate the roots of $-x^2 - 3x + 4 = x$

..... (1)