



Quadratic Graphs Exam Practice

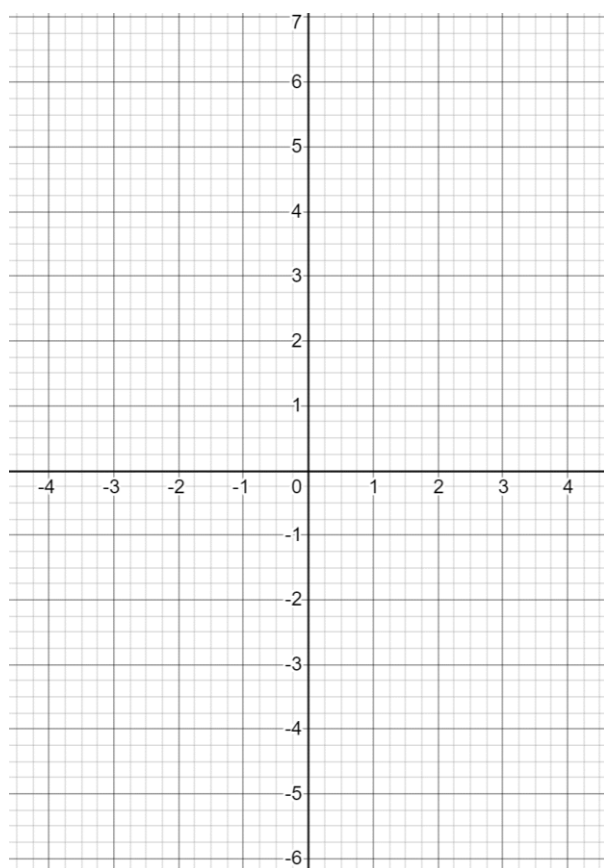
Q1. Complete the table of values for $y = x^2 - 5$

a)

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

(3 marks)

b) On the grid below, draw the graph of $y = x^2 - 5$



(3 marks)

c) Use the graph to estimate the solutions of the equation $x^2 - 5 = 0$

Answer: _____

(3 marks)



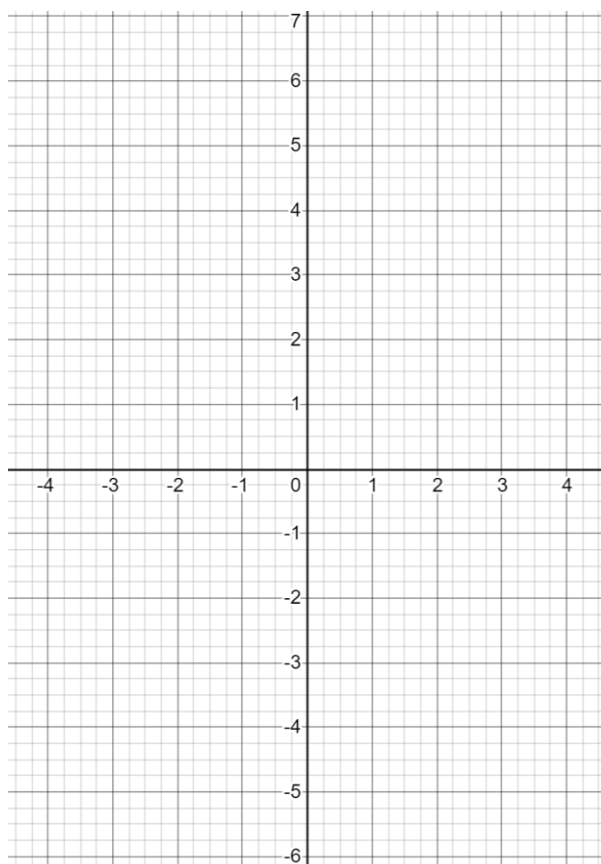
Q2. Complete the table of values for $y = 2x^2 - 7x + 2$

a)

x	0	0.5	1	1.5	2	2.5	3
y							

(3 marks)

b) On the grid below, draw the graph of $y = 2x^2 - 7x + 2$



(3 marks)

c) Use the graph to estimate the solutions of the equation $2x^2 - 7x + 2 = 0$

Answer: _____

(3 marks)



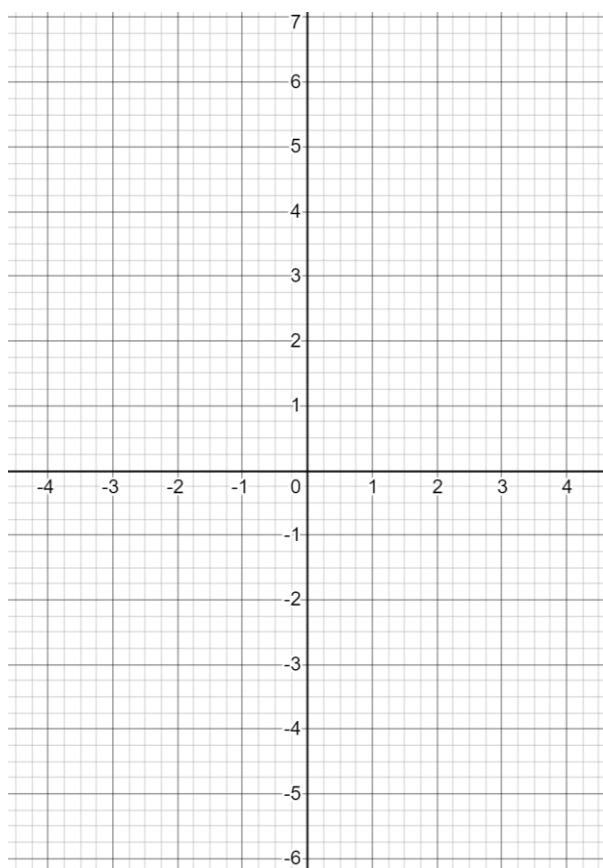
Q3. Complete the table of values for $y = 4 - x^2$

a)

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

(3 marks)

b) On the grid below, draw the graph of $y = 4 - x^2$



(3 marks)

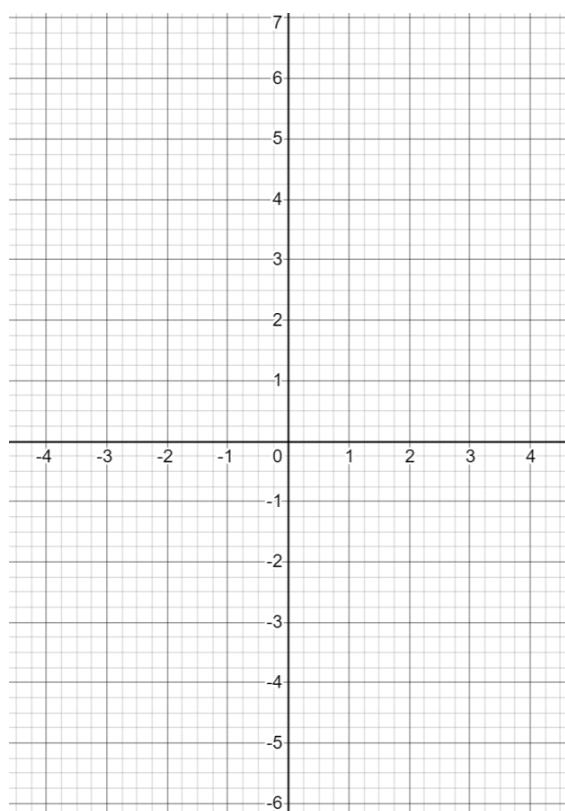
c) Use the graph to estimate the solutions of the equation $4 - x^2 = 0$

Answer: _____

(3 marks)



Q4. a) On the grid below, draw the graph of $y = x(x - 3)$



(6 marks)

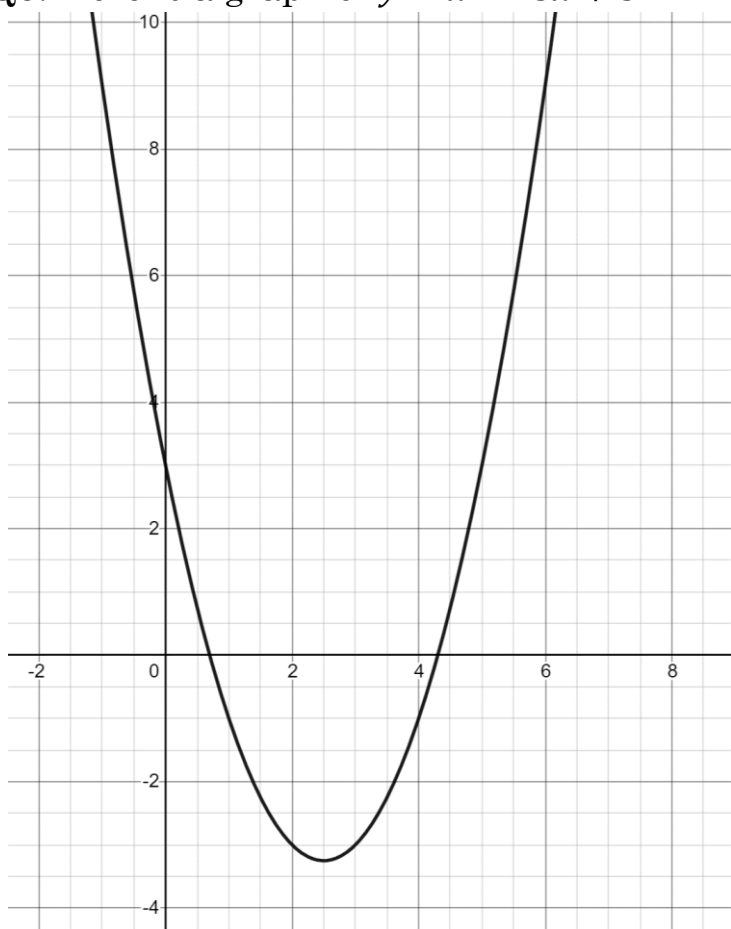
b) Use the graph to estimate the solutions of the equation $x^2 - 3x + 2 = 0$

Answer: _____

(3 marks)



Q5. Here is a graph of $y = x^2 - 5x + 3$



a) Use the graph to estimate the solutions of the equation $x^2 - 5x + 3 = 0$

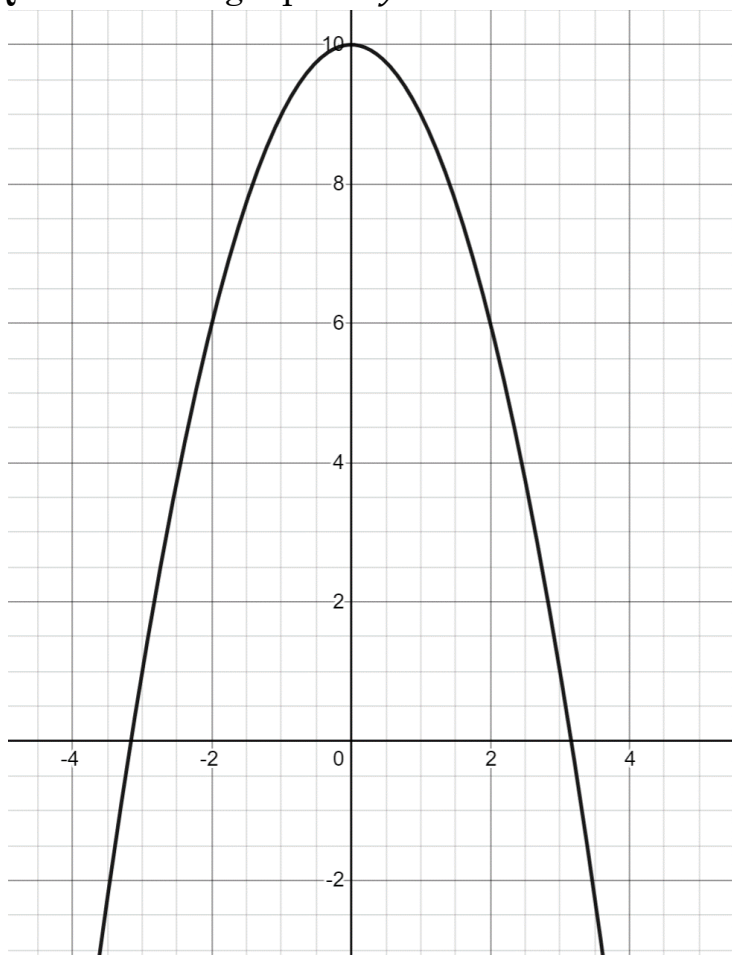
Answer: _____
(3 marks)

b) Use the graph to estimate the turning point of the graph $y = x^2 - 5x + 3$

Answer: _____
(3 marks)



Q6. Here is a graph of $y = 10 - x^2$



a) Use the graph to estimate the solutions of the equation $10 - x^2 = 2$

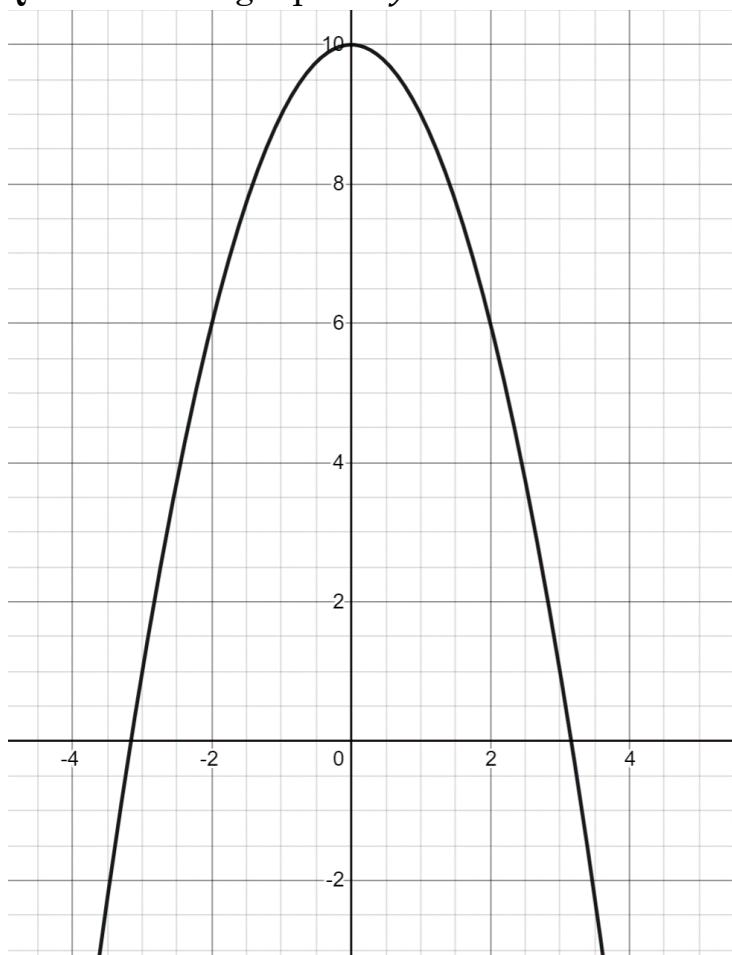
Answer: _____
(3 marks)

b) Use the graph to estimate the turning point of the graph $y = 10 - x^2$

Answer: _____
(3 marks)



Q7. Here is a graph of $y = 4 - 3x - x^2$



a) Use the graph to estimate the solutions of the equation $4 - 3x - x^2 \geq 0$

Answer: _____
(3 marks)

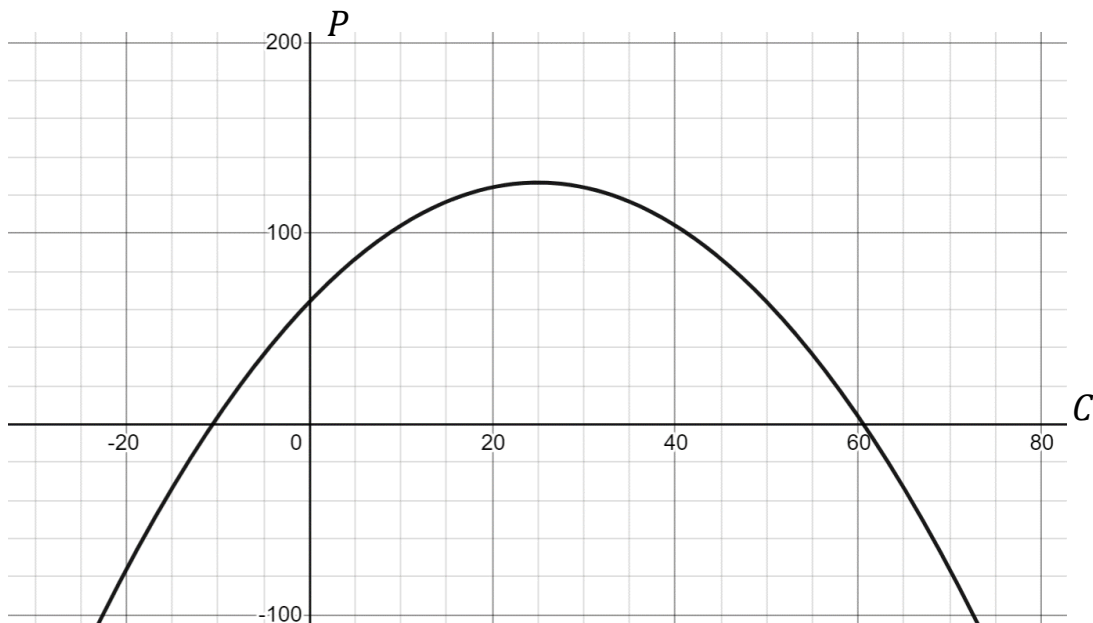
b) Use the graph to estimate the turning point of the graph $y = 4 - 3x - x^2$

Answer: _____
(3 marks)



Applied Problem Solving

Q8. SportsZone model the cost C (£) they charge for their tennis racket against the profit P (£) they make from the sale of each racket.



a) Use the graph to estimate the price SportZone should charge to make a profit of £40.

Answer: _____
(2 marks)

b) Use the graph to estimate the optimal price SportsZone should charge for the racket.

Answer: _____
(2 marks)

c) Give 2 reasons why Sportzone's model is unrealistic.

Answer: _____
(2 marks)

