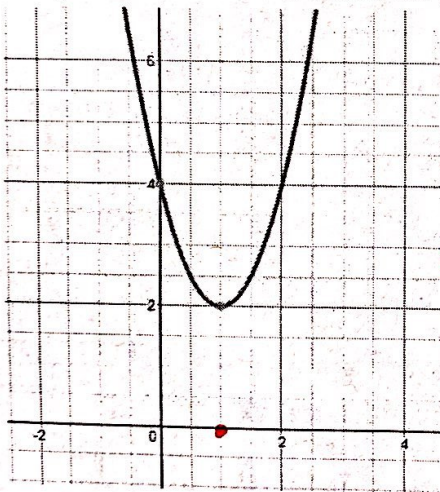


LT #1: Introduction to Quadratic Functions

1. Given $y = 2(x + 1)^2 - 2$
 - a. Identify the vertex
 - b. Identify the axis of symmetry
 - c. Identify the maximum or minimum value
 - d. Identify the domain of the function
 - e. Identify the range

2. Does the graph of the parabola $f(x) = -2x^2 + 3x - 1$ open up or down?

3. Write a quadratic function to model the graph. Hint: Start with the vertex.



(1, 2)

1. (6 Points)

Vertex: $(-1, -2)$

AOS: $x = -1$

Max/Min: -2

(Circle Max or Min and indicate value)

Domain: \mathbb{R}

Range: $y \geq -2$

2. (1 Point)

Opens Up or Opens Down
(Circle one)

3. (3 Points)

$y = (x - 1)^2 + 2$