

10.1 – Analyzing Graphs of Quadratic Functions

For each quadratic function, find the indicated information:

1. $y = x^2 + 4x + 3$

Vertex: $(-2, -1)$

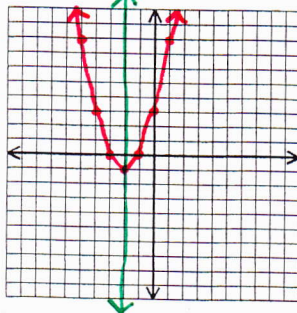
Axis of Symmetry: $x = -2$

Max or Min value: $y = -1$

Domain: \mathbb{R}

Range: $y \geq -1$

X-Intercepts: $(-3, 0)$ & $(-1, 0)$



2. $y = 3(x - 2)^2$

Vertex: $(2, 0)$

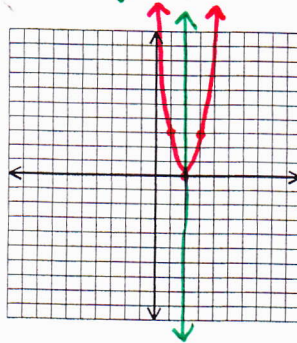
Axis of Symmetry: $x = 2$

Max or Min value: $y = 0$

Domain: \mathbb{R}

Range: $y \geq 0$

X-Intercepts: $(2, 0)$



3. $y = -2(x - 2)(x + 2)$

Vertex: $(0, 8)$

Axis of Symmetry: $x = 0$

Max or Min value: $y = 8$

Domain: \mathbb{R}

Range: $y \leq 8$

X-Intercepts: $(-2, 0)$ & $(2, 0)$

