

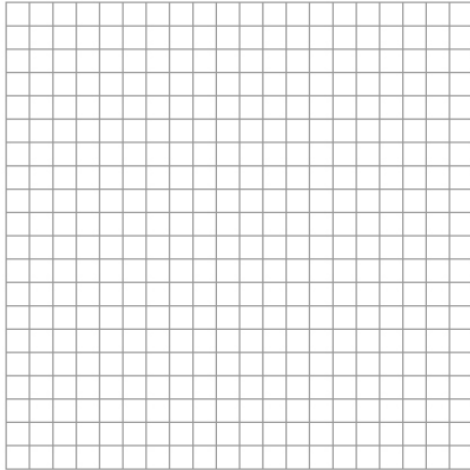
Name : _____

Graphing Quadratic Functions

$$\text{Vertex Form } f(x) = a(x - h)^2 + k$$

Graph the given quadratic functions and find the vertex and the axis of symmetry.

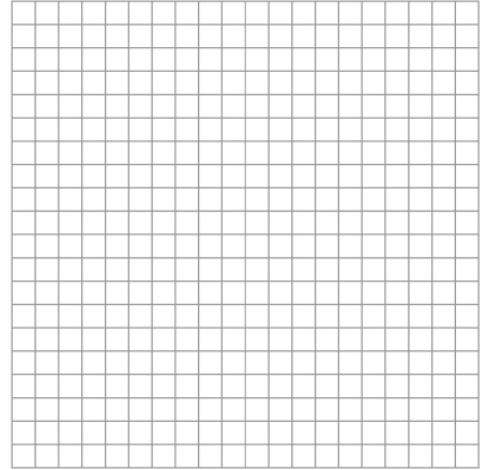
① $y = 2(x + 1)^2 - 3$



Vertex : _____

Axis of Symmetry : _____

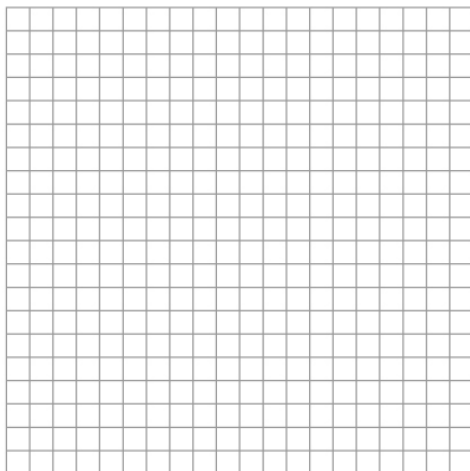
② $y = \frac{1}{2}(x - 3)^2 + 2$



Vertex : _____

Axis of Symmetry : _____

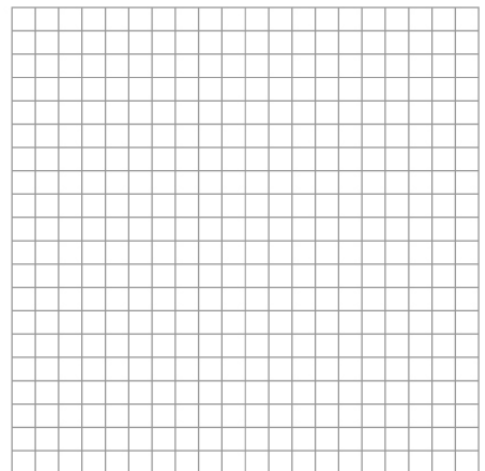
③ $y = -(x - 3)^2 + 6$



Vertex : _____

Axis of Symmetry : _____

④ $y = 2(x - 3)^2 + 9$



Vertex : _____

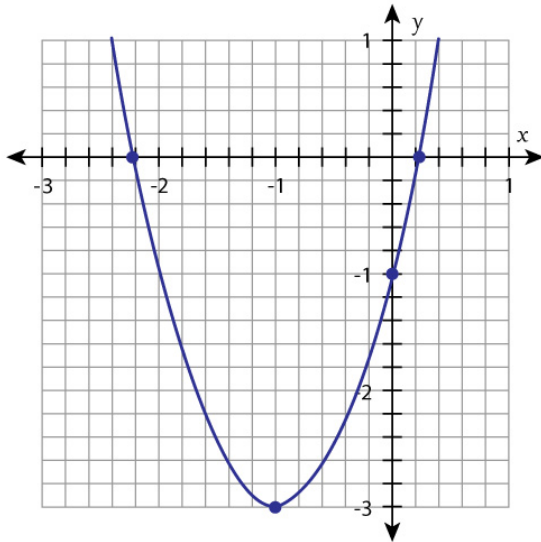
Axis of Symmetry : _____

Graphing Quadratic Functions

Vertex Form $f(x) = a(x - h)^2 + k$

Answers

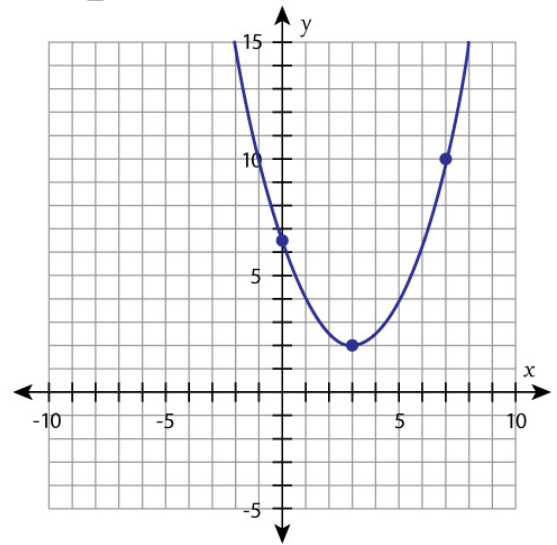
① $y = 2(x + 1)^2 - 3$



Vertex : $(-1, -3)$

Axis of Symmetry : $x = -1$

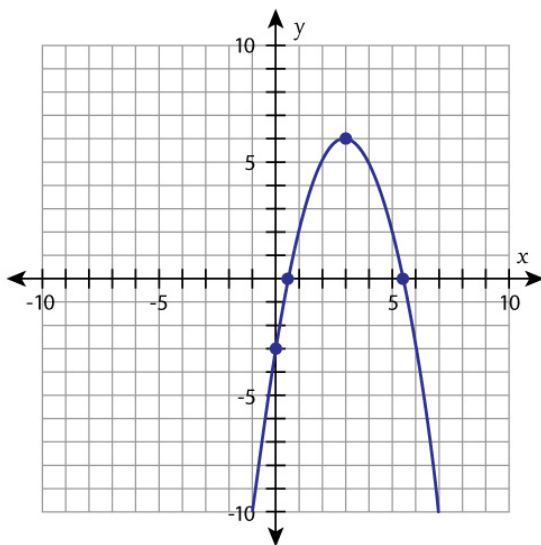
② $y = \frac{1}{2}(x - 3)^2 + 2$



Vertex : $(3, 2)$

Axis of Symmetry : $x = 3$

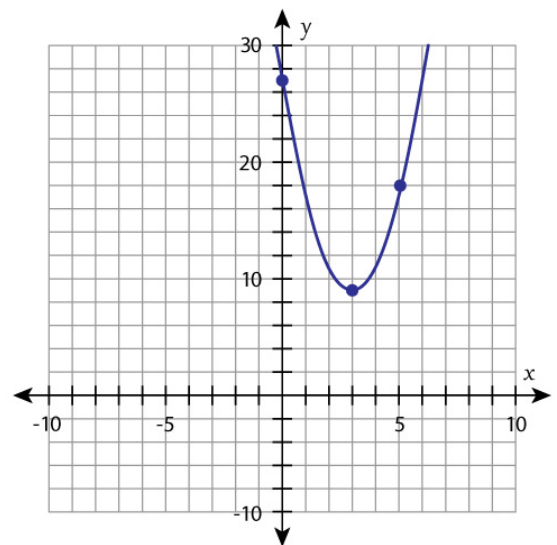
③ $y = -(x - 3)^2 + 6$



Vertex : $(3, 6)$

Axis of Symmetry : $x = 3$

④ $y = 2(x - 3)^2 + 9$



Vertex : $(3, 9)$

Axis of Symmetry : $x = 3$