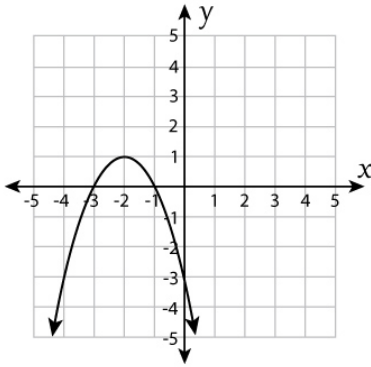


Name : _____

Characteristics of Quadratic Equations Worksheet

Find the properties of each given quadratic function.

1



Domain: _____

Range: _____

x-intercepts : _____

y-intercept : _____

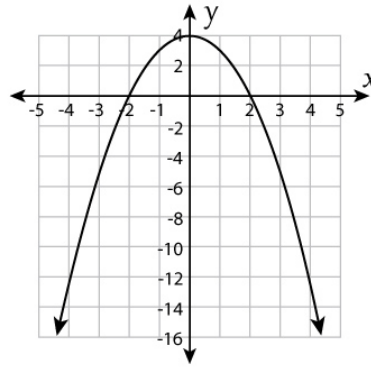
Vertex : _____

Maximum value : _____

Axis of symmetry : _____

Open up or down : _____

2



Domain: _____

Range: _____

x-intercepts : _____

y-intercept : _____

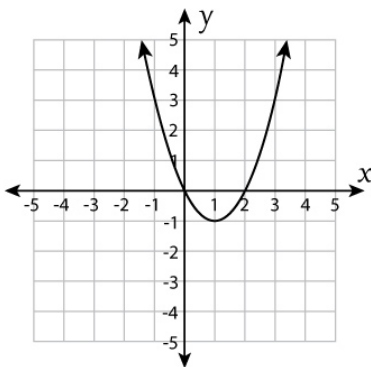
Vertex : _____

Maximum value : _____

Axis of symmetry : _____

Open up or down : _____

3



Domain: _____

Range: _____

x-intercepts : _____

y-intercept : _____

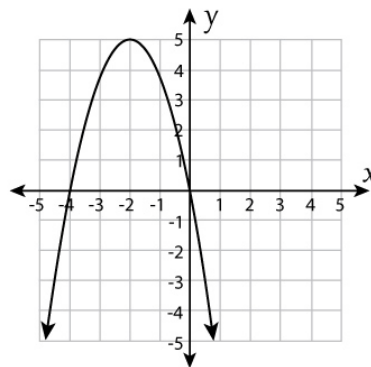
Vertex : _____

Maximum value : _____

Axis of symmetry : _____

Open up or down : _____

4



Domain: _____

Range: _____

x-intercepts : _____

y-intercept : _____

Vertex : _____

Maximum value : _____

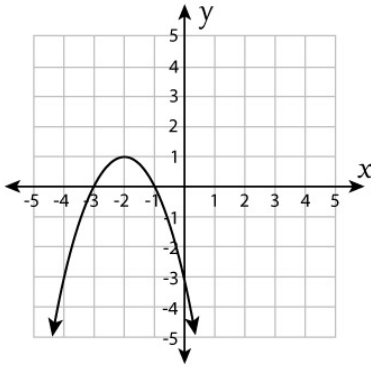
Axis of symmetry : _____

Open up or down : _____

Characteristics of Quadratic Equations Worksheet

Answers

①



Domain: : Real Numbers

Range: : {y is real : $y \leq 1$ }

x-intercepts : $(-3, 0)$ and $(1, 0)$

y-intercept : $(0, -3)$

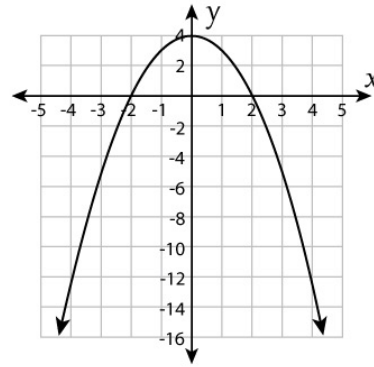
Vertex : $(-2, 1)$

Maximum value : $y = 1$

Axis of symmetry : $x = -2$

Open up or down : Down

②



Domain: : Real Numbers

Range: : {y is real : $y \leq 4$ }

x-intercepts : $(-2, 0)$ and $(2, 0)$

y-intercept : $(0, 4)$

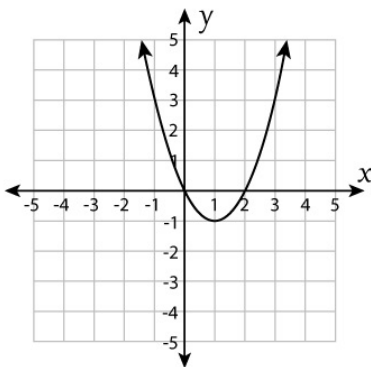
Vertex : $(0, 4)$

Maximum value : $y = 4$

Axis of symmetry : $x = 0$

Open up or down : Down

③



Domain: : Real Numbers

Range: : {y is real : $y \geq -1$ }

x-intercepts : $(0, 0)$ and $(2, 0)$

y-intercept : $(0, 0)$

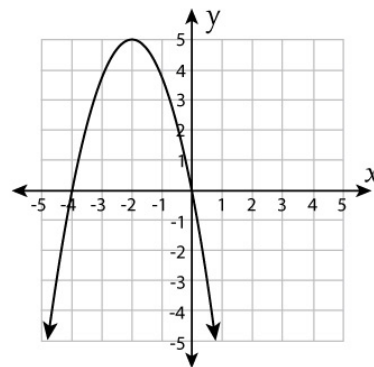
Vertex : $(1, -1)$

Maximum value : $y = -1$

Axis of symmetry : $x = 1$

Open up or down : Up

④



Domain: : Real Numbers

Range: : {y is real : $y \leq 8$ }

x-intercepts : $(-6, 0)$ and $(2, 0)$

y-intercept : $(0, 6)$

Vertex : $(-2, 8)$

Maximum value : $y = 8$

Axis of symmetry : $x = -2$

Open up or down : Down