SECTION 2.3: MORE PARABOLAS

Homework: _____

Learning Targets:

2b. Understanding of how to find and describe the different characteristics of quadratic functions.

2d. Understanding of how to graph vertical and horizontal parabolas using vertex form equations

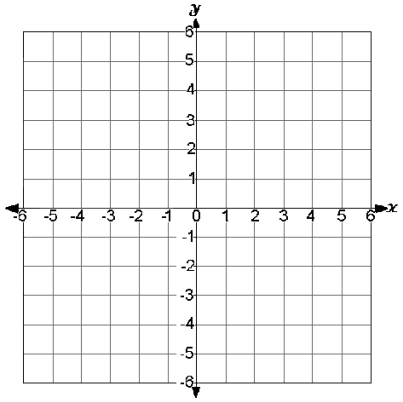
Vertical Parabolas $y =$		**Horizontal Parabolas** $x =$	
$y = x^2$	$y = -x^2$	$x = y^2$	$x = -y^2$
$y = a(x-h)^2 + k$		$x = a(y-k)^2 + h$	
Axis of Symmetry		**Axis of Symmetry**	
Domain	**Range**	**Domain**	**Range**

Graph each function. Determine the direction, vertex, axis of symmetry, domain, and range.

1. $y = 3(x-2)^2 + 5$

Vertex: _____ Axis: _____

Direction: _____

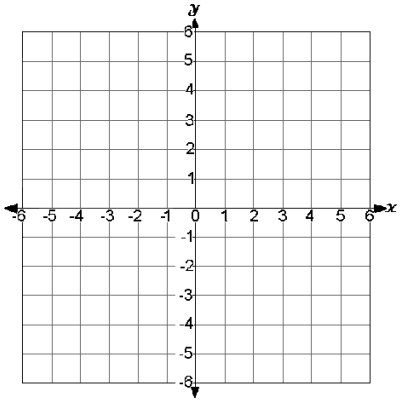


Domain: _____ Range: _____

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

Vertex: _____ Axis: _____

Direction: _____

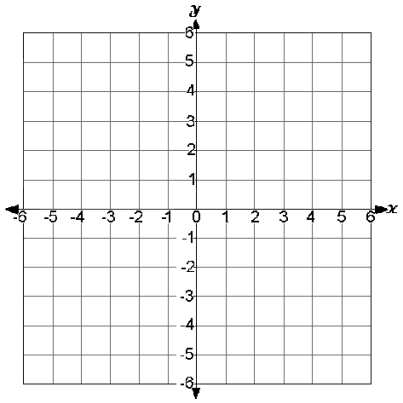


Domain: _____ Range: _____

3. $y = -\frac{1}{2}(x+1)^2$

Vertex: _____ Axis: _____

Direction: _____

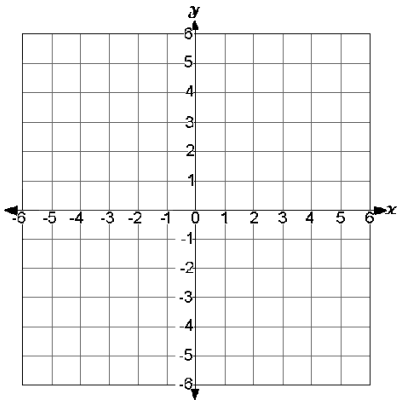


Domain: _____ Range: _____

4. $x = (y-3)^2 + 5$

Vertex: _____ Axis: _____

Direction: _____



Domain: _____ Range: _____