Graph the functions. Label the vertex with an ordered pair. Label the axis of symmetry with an equation. Find more points when necessary.

 $1. y = (x - 7)^2 - 1$

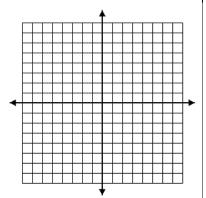
Vertex: Extra Points: Axis of Symm:

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

Vertex:

Axis of Symm:

Extra Points:



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

Extra Points:

Vertex:

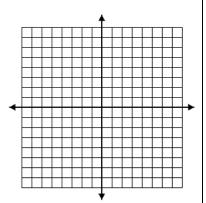
Axis of Symm:

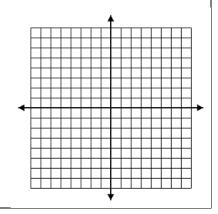
4. $y = 2(x+1)^2 - 3$

Vertex:

Axis of Symm:

Extra Points:





Graph the functions. Label the x-intercepts with an ordered pair. Label the axis of symmetry with an equation. Label the Vertex with an ordered pair. Find more points when necessary.

5. y = (x+1)(x-3)

x-intercepts:

Vertex: Axis of Symm:

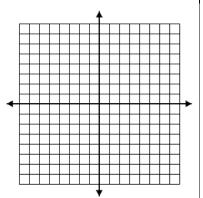
Extra Points:

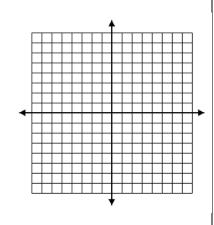
2. y = (x + 3)(x - 3)

x-intercepts:

Vertex: Axis of Symm:

Extra Points:





3. y = 3(x+2)(x+6)

x-intercepts:

Vertex: Axis of Symm:

Extra Points:

4.
$$y = -x(x+4)$$

x-intercepts:

Vertex: Axis of Symm:

Extra Points:

