Intermediate Algebra A **Name** _____

L.T. 4.1 A – B **Period** _____

1) Find the Vertex for the equation:

$$y = x^2 - 4x + 3$$

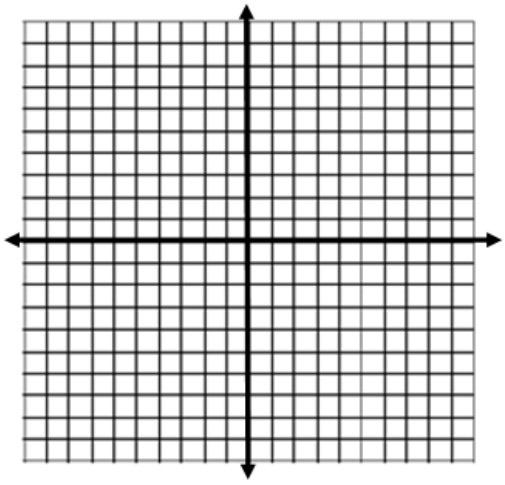
Hint: $(\frac{-b}{2a}, f(\frac{-b}{2a}))$

Based on the equation, will the vertex be a maximum or a minimum?

Find the vertex:

2) **From #1:** Fill in the table below and plot the points to graph the equation. (Include the axis of symmetry as a dashed line)

X	Y



3) **From #1:**

Identify:

Axis of Symmetry: _____

Y – intercept: _____

Domain: _____ Range: _____

4) Find the x-intercepts and the vertex for:

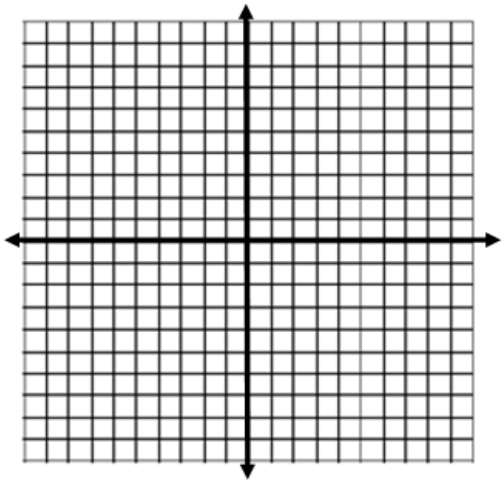
$$y = (x + 5)(x - 1)$$

x-intercepts: _____

Vertex: _____

5) **From #4:** Fill in the table below and plot the points to graph the equation. (Include the axis of symmetry as a dashed line)

X	Y



6) **From #4:**

Identify:

Axis of Symmetry: _____

Y – intercept: _____

Domain: _____ Range: _____

Intermediate Algebra A **Name** _____

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Round Table

1. Find the Vertex for the equation:

$$y = -(x-3)^2 - 6$$

Vertex: _____

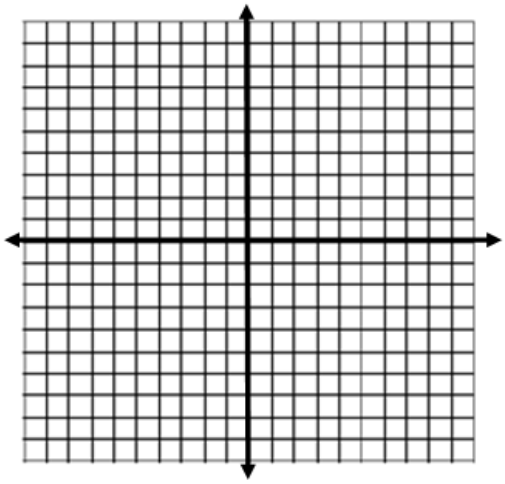
Based on the equation, will the vertex be a maximum or a minimum?

2. What will the axis of symmetry be for the parabola?

Axis of Symmetry:

X = _____

3. **Algebraically,** fill in the table below and plot the points to graph the equation. (Include the axis of symmetry as a dashed line)



X	Y

4. What is the Domain and Range of the graph?

Domain:

Range: