Algebra 2   Graphing Quadratic Functions Both Forms   Date _____

1. **Decide if the graph of the parabola opens up or down in each quadratic function and find the vertex**

   a. $y = -5x^2 + 10x - 2$ **b.** $y = (x+1)^2 - 4$

2. **Find the x and y-intercepts on the graphs.**
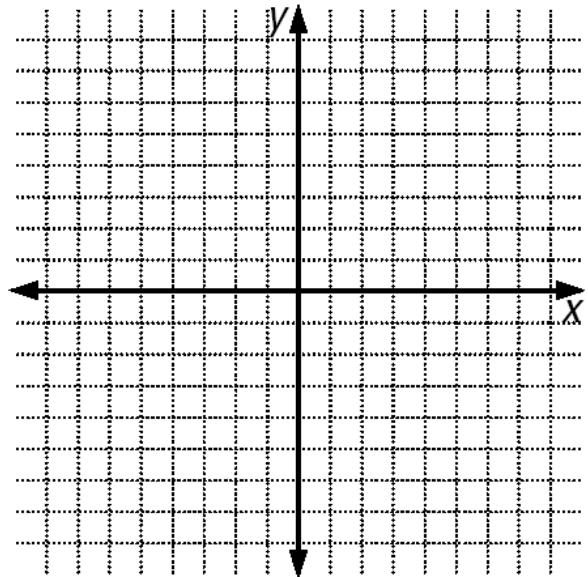
   a. $y = -5x^2 + 10x - 2$ **b.** $y = (x+1)^2 - 4$

3. **Graph the quadratic function. Include a table.**
   Use the vertex, the y-intercept and it's reflection
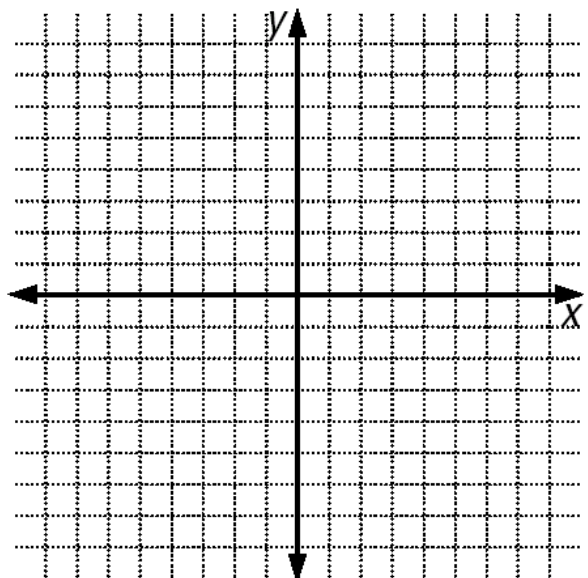   Draw and label the axis of symmetry.

   $y = x^2 + 4x - 1$

4. **Graph the quadratic function. Include a table.**
   Use the vertex, the y-intercept and it's reflection
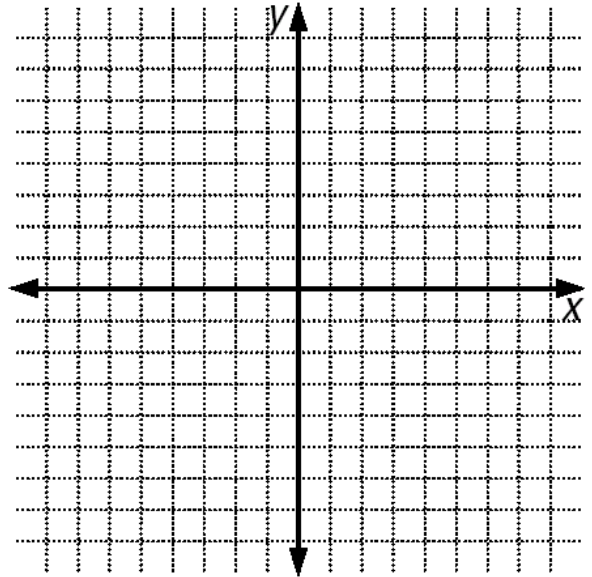   Draw and label the axis of symmetry.

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

5. Graph the quadratic function. Include a table.
   Use the vertex, the y-intercept and it's reflection
   Draw and label the axis of symmetry.

$$y = 2x^2 - 8x + 3$$

6. Graph the quadratic function. Include a table.
   Use the vertex, the y-intercept and it's reflection
   Draw and label the axis of symmetry.

$$y = -(x - 4)^2 + 2$$