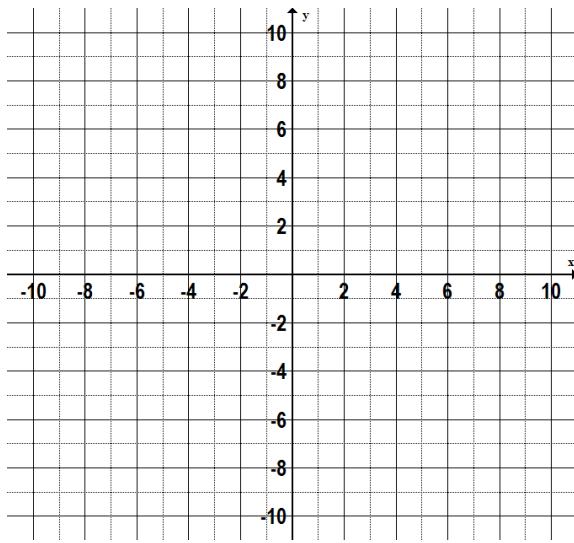


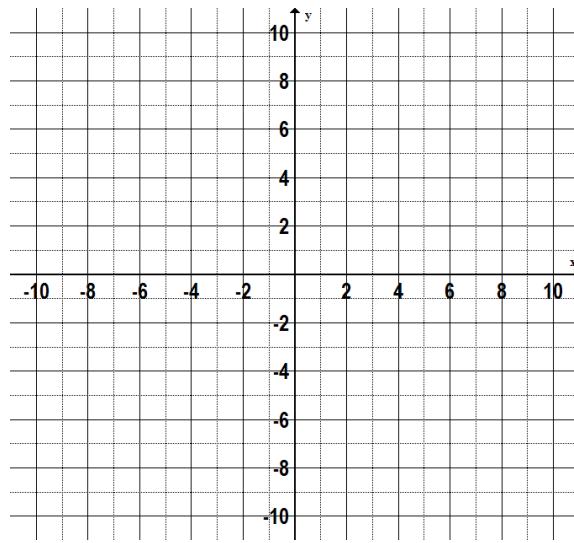
Name: \_\_\_\_\_

1. Graph each parabola. Label the vertex and axis of symmetry.

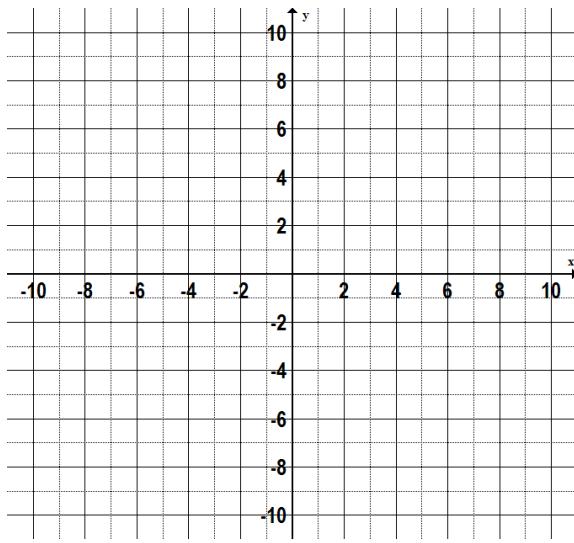
a.  $y = x^2 - 6$



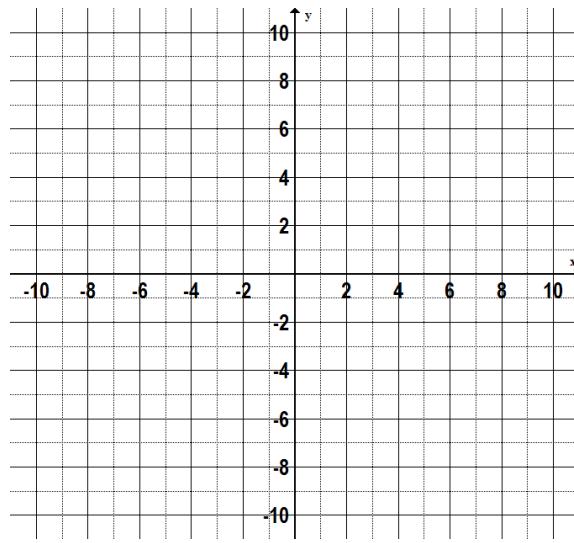
c.  $y = -3(x + 4)^2 + 2$



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



d.  $y = -x^2 + 6x$



2. Solve each quadratic equation.

a.  $x^2 - 5x + 6 = 0$

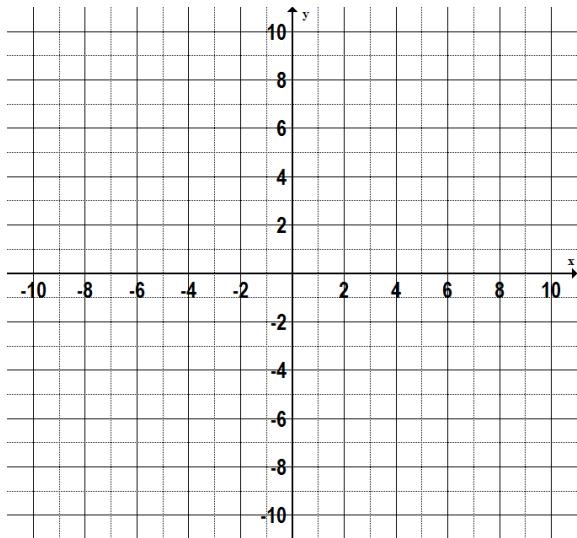
b.  $3x^2 - 5 = 70$

Name: \_\_\_\_\_

3. For each quadratic relation, list the transformations you need to apply to  $y = x^2$  to graph the relation. Then sketch the graph.

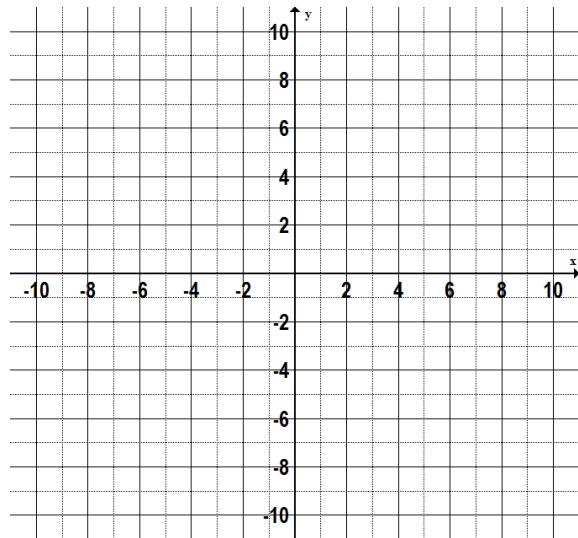
a.  $y = x^2 - 2$

Transformations:



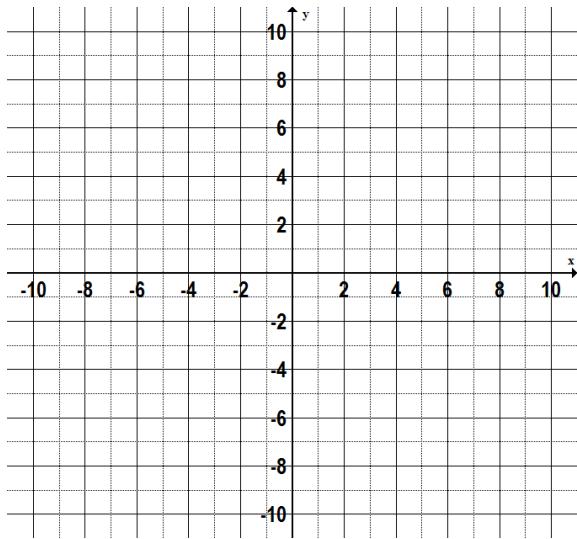
c.  $y = \frac{1}{2}(x - 1)^2 - 4$

Transformations:



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

Transformations:



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

Transformations:

