

Alg 1 Honors 10.1-10.2 Homework

Name: _____

Find the axis of symmetry and vertex of each function.

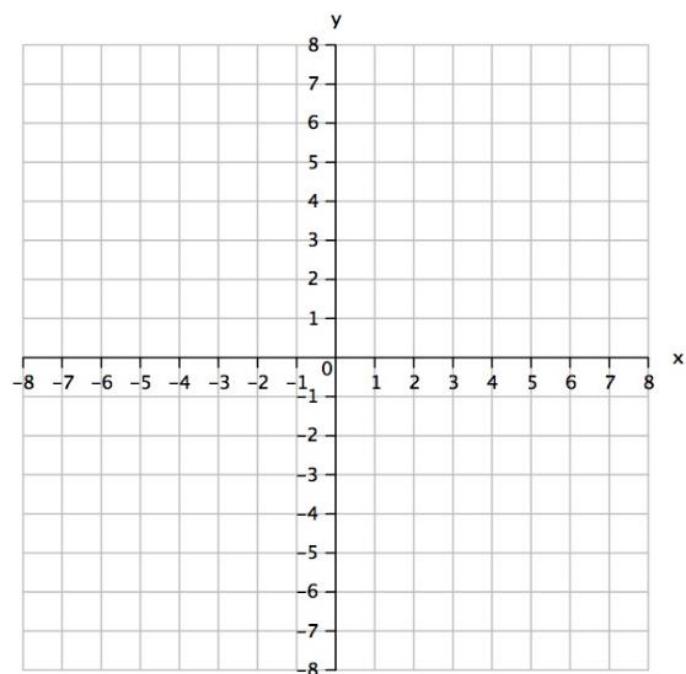
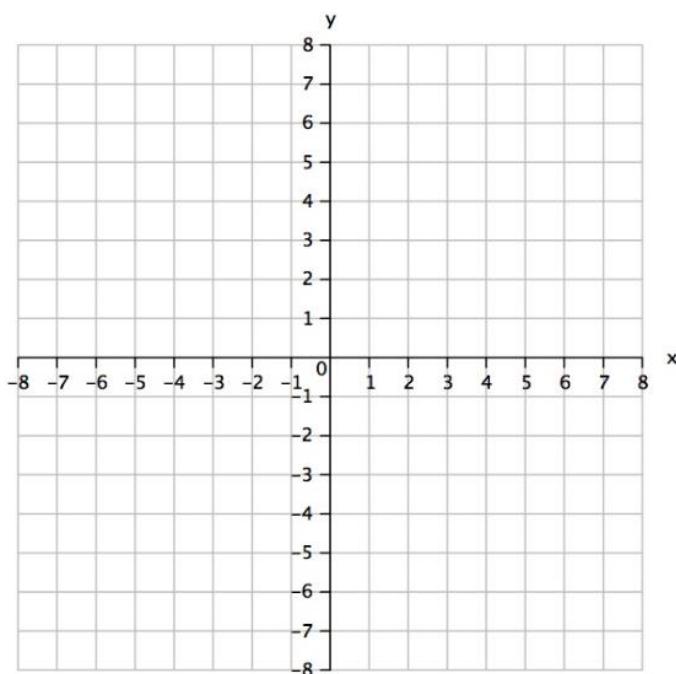
1. $y = 2x^2 - 8x + 6$

2. $y = -3x^2 + 24x - 22$

Graph each. Find/label the axis of symmetry and vertex. Plot a total of 5 points (show your chart of x and y values)

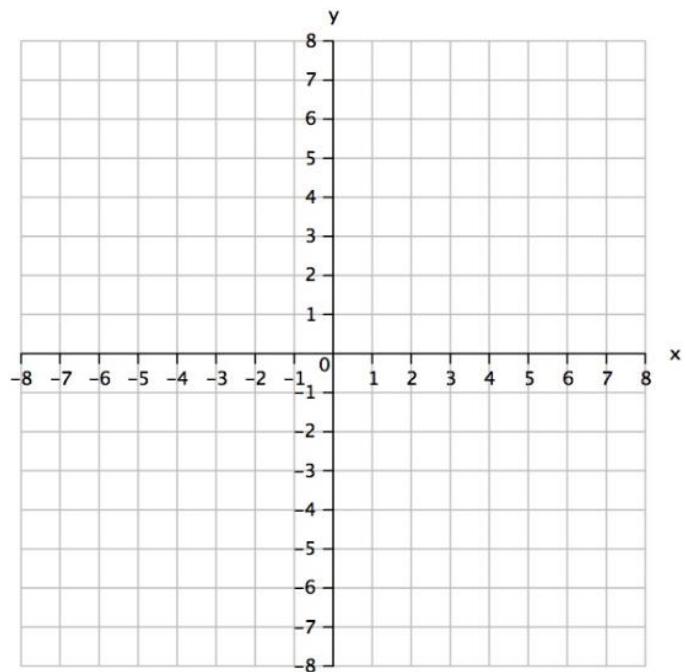
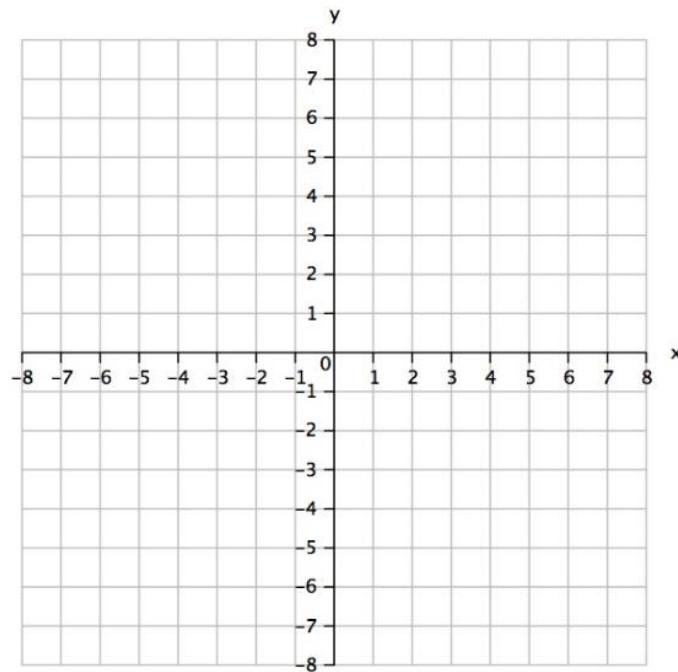
3. $y = x^2 + 6x + 2$

4. $y = -3x^2 - 2x - 5$



$$5. \quad y = x^2 - 2$$

$$6. \quad y = 2x^2 - 6x$$



Tell whether the function has a *maximum value* or a *minimum value*. Then, find the maximum or minimum value.

$$7. \quad f(x) = x^2 - 6$$

$$8. \quad f(x) = -3x^2 + 12x - 20$$