

Name: _____

Unit 3: Parent Functions & Transformations

Date: _____ Per: _____

Homework 7: Converting to Vertex Form

**** This is a 2-page document! ****

Write each function in vertex form. Give the vertex.

1. $f(x) = x^2 - 12x + 36$

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

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

4. $f(x) = 3x^2 + 6x - 4$

5. $f(x) = x^2 + 7x - 10$

6. $f(x) = -x^2 + 6x - 10$

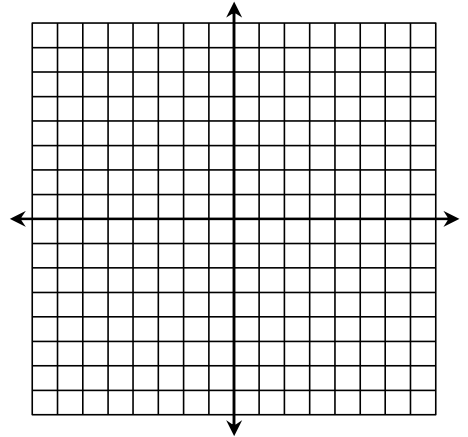
7. $f(x) = -6x^2 + 42x$

8. $f(x) = \frac{1}{2}x^2 - 4x + 7$

Write each function in vertex form. Identify the vertex and axis of symmetry, then graph.

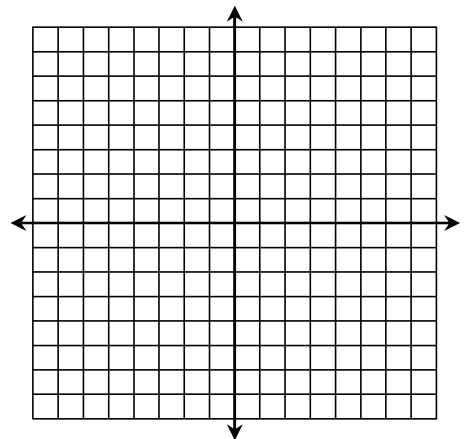
9. $f(x) = x^2 + 10x + 18$

x	$f(x)$



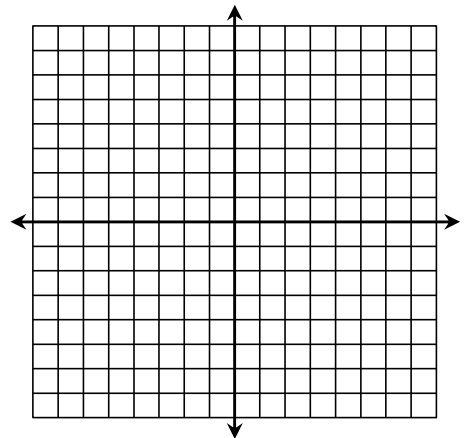
10. $f(x) = -x^2 + 4x - 6$

x	$f(x)$



11. $f(x) = -2x^2 + 8x - 1$

x	$f(x)$



12. $f(x) = 3x^2 + 6x$

x	$f(x)$

