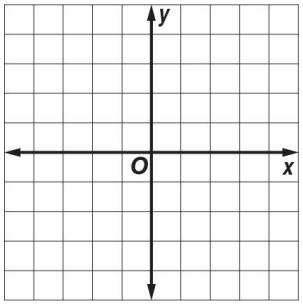
NAME _____ DATE _____ PERIOD _____

9-1 Skills Practice

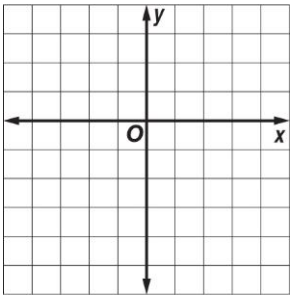
Graphing Quadratic Functions

Use a table of values to graph each function. State the domain and the range.

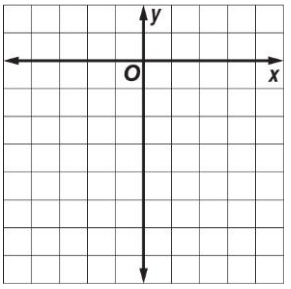
1. $y = x^2 - 4$



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



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



Find the vertex, the equation of the axis of symmetry, and the *y*–intercept of the graph of each function.

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

5. $y = x^2 + 4x + 6$

6. $y = -3x^2 - 12x + 3$

Consider each equation.

a. Determine whether the function has a *maximum* or a *minimum* value.

b. State the maximum or minimum value.

c. What are the domain and range of the function?

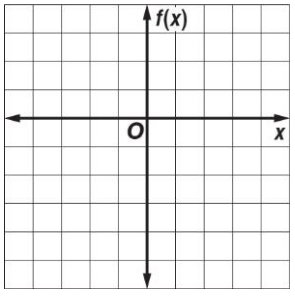
7. $y = 2x^2$

8. $y = x^2 - 2x - 5$

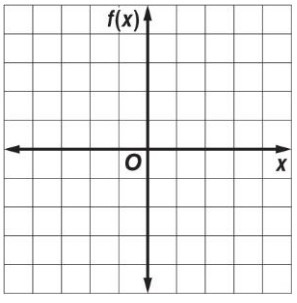
9. $y = -x^2 + 4x - 1$

Graph each function.

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



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



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