Name_____Class_____Date_____

Identify the vertex of each graph. Tell whether it is a minimum or a maximum.

1. $y = -3x^2$
2. $y = -7x^2$
3. $y = 0.5x^2$

Order each group of quadratic functions from widest to narrowest graph.
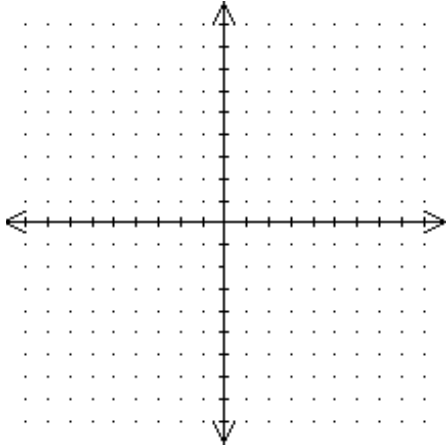
4. $y = x^2$, $y = 5x^2$, $y = 3x^2$
5. $y = -8x^2$, $y = 1/2x^2$, $y = -x^2$

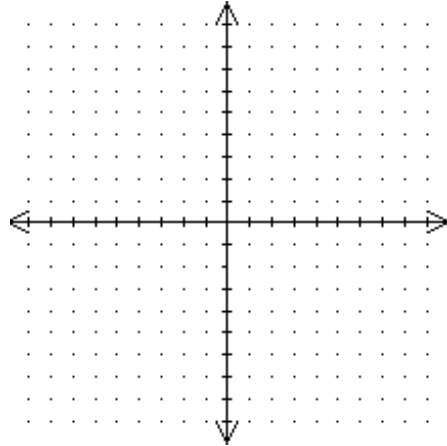6. $y = 5x^2$, $y = -4x^2$, $y = 2x^2$
7. $y = -1/3x^2$, $y = x^2$, $y = -3x^2$
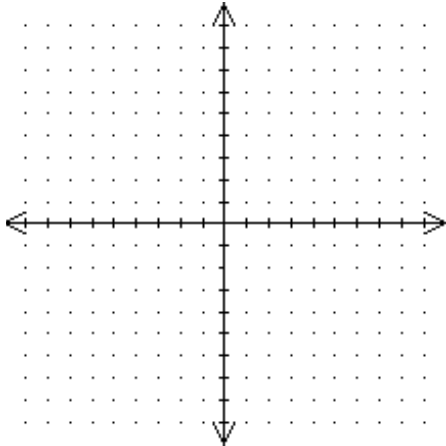
Graph each function.
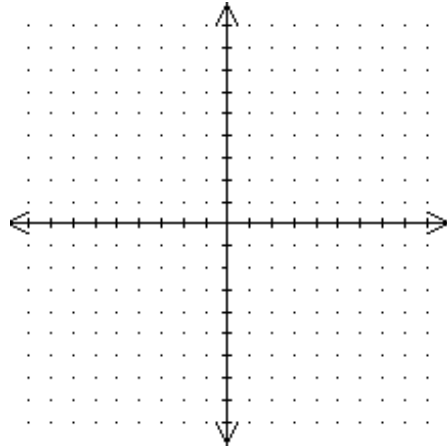
8. $y = 2x^2$

9. $y = -3x^2$

10. $y = x^2 - 3$

11. $y = -x^2 + 4$

12. The price of a stock on the NYSE is modeled by the function $y = 0.005x^2 + 10$, where x is the number of months the stock has been available.
    a. Graph the function.
    b. What x–values make sense for the domain? Explain why.
    c. What y–values make sense for the range? Explain why.