T 4-1 and T 4-2 RETAKE PROBLEMS Name/Per.:_____

4.1 Graphing Quadratics

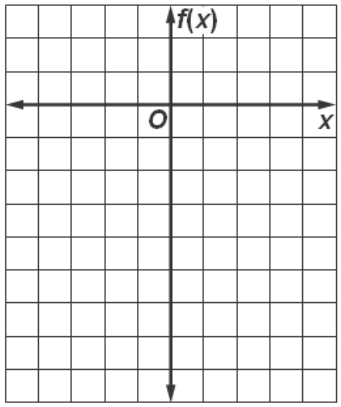
Complete parts a–c for each quadratic function.

a. Find the *y*–intercept, the equation of the axis of symmetry, and the *x*–coordinate of the vertex.

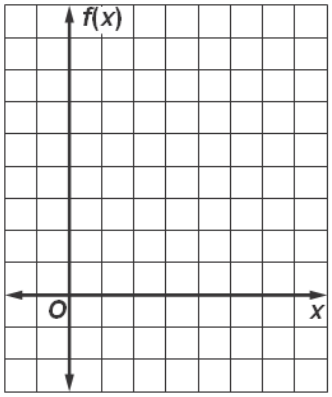
b. Make a table of values that includes the vertex.

c. Use this information to graph the function.

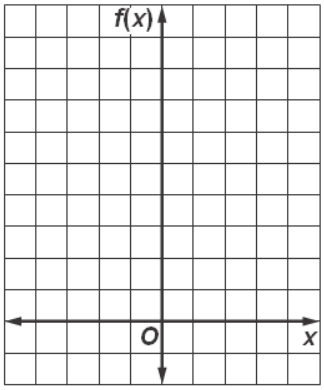
1. $f(x) = -2x^2$



2. $f(x) = x^2 - 6x + 8$



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



Determine whether each function has a maximum or a minimum value, and find that value. Then state the domain and range of the function.

4. $f(x) = -8x^2$

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

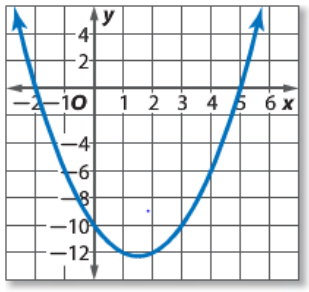
6. $f(x) = 3x^2 + 12x + 3$

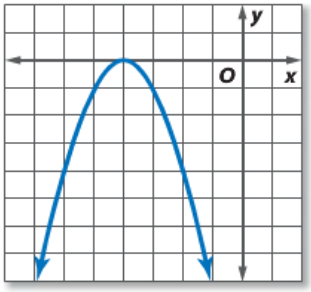
7. $f(x) = -2x^2 + 8x + 7$

T 4-1 and T 4-2 RETAKE PROBLEMS Name/Per.:_____

4.2 Solving Quadratics by Graphing

For exercises 1-2 list how many solutions are present. Then write an equation in factored form and in standard form.

1. 

2. 

Solve problems 3-6 by graphing. Draw your own axis so your graph fits. Box your answer(s). Show your work!

3. $-x^2 + 8x - 16 = 0$

4. $x^2 + 4x + 4 = 0$

5. $-3x^2 + 3 = 0$

13. $-5 - 4x + x^2 = 0$