

Name \_\_\_\_\_

### 8-3 Reteach to Build Understanding

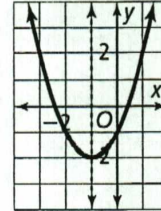
#### Quadratic Functions in Standard Form

1. Fill in the matching part on the graph to the right.

The y-intercept is \_\_\_\_\_.

The axis of symmetry is \_\_\_\_\_.

The vertex is \_\_\_\_\_.



2. Circle the correct answer.

The equation for finding the x-coordinate of the axis of symmetry is:

$c$                        $-\frac{b}{2a}$                        $f(x) = ax^2 + bx + c$

3. For the graph of  $f(x) = -3x^2 + 6x - 1$ , draw lines from each part of the parabola to the correct answer.

- |                            |         |
|----------------------------|---------|
| y-intercept                | 1       |
| axis of symmetry           | -1      |
| x-coordinate of the vertex | $x = 1$ |
| y-coordinate of the vertex | (1, 2)  |
| vertex                     | 2       |

4. Chen predicted that the function  $f(x) = 1.5x^2 - 9x + 7$  would have an axis of symmetry at  $x = 3$  with the vertex at  $(3, 7)$ . Do you agree or disagree with Chen? Explain.

5. Fill in the missing spaces in the table below.

Features	$f(x) = -2x^2 + 8x + 1$	$g(x) = 3x^2 + 6x - 4$
y-intercept		(0, -4)
vertex	(-2, _____)	(_____, -7)
axis of symmetry	$x = -2$	
maximum or minimum value		minimum
opens upward or downward		upward