

NAME \_\_\_\_\_

DATE \_\_\_\_\_

**Module 14** Graphing Quadratic Relations  
**Lesson 1** Graphing Simple Quadratic Relations



**additional  
practice**

**Find the equation of the axis of symmetry.**

1.  $y = x^2 + 2x + 1$  \_\_\_\_\_

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

3.  $y = 2x^2 + 8x - 2$  \_\_\_\_\_

4.  $y = 3x^2 - 6x + 2$  \_\_\_\_\_

5.  $y = 3x^2 + x - 5$  \_\_\_\_\_

6.  $y = 2x^2 - 5$  \_\_\_\_\_

**Identify the vertex.**

7.  $y = x^2 - 6x + 1$  \_\_\_\_\_

8.  $y = -x^2 + 2x + 1$  \_\_\_\_\_

9.  $y = 2x^2 - 4x + 3$  \_\_\_\_\_

10.  $y = 3x^2 - 6x + 1$  \_\_\_\_\_

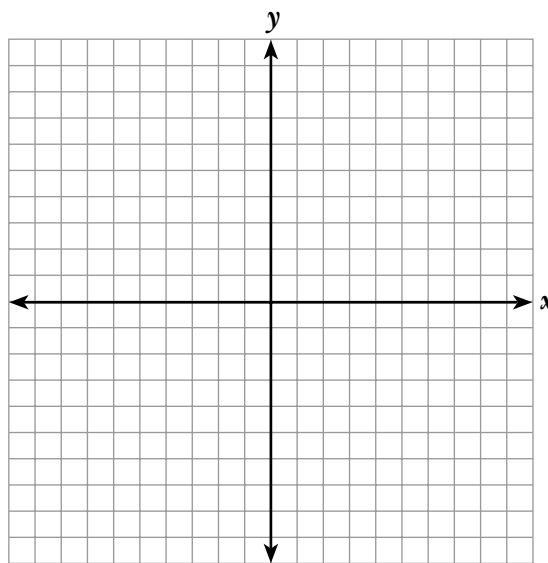
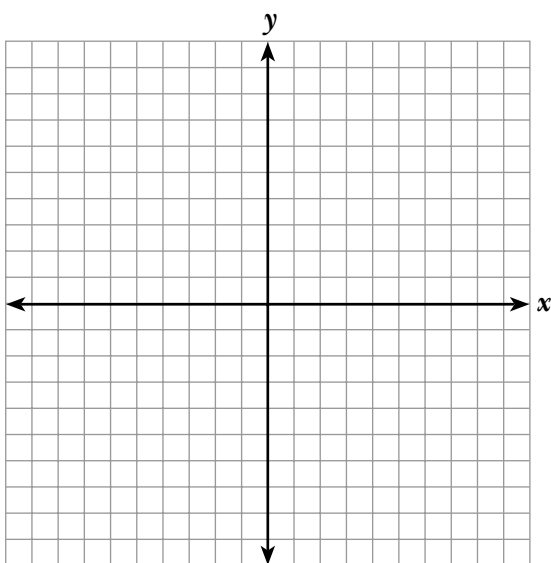
11.  $y = -2x^2 - 8x + 5$  \_\_\_\_\_

12.  $y = 5x^2 + 7$  \_\_\_\_\_

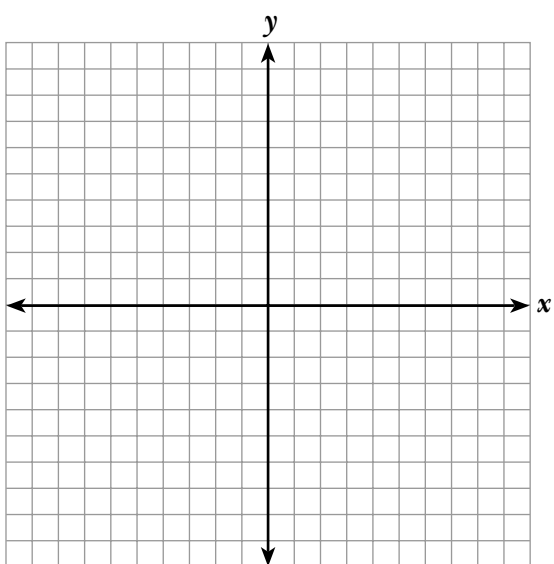
**Graph.**

13.  $y = x^2 + 2x + 1$

14.  $y = 2x^2 + 4x + 3$



15.  $y = -x^2 + 4x + 3$



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

