

NAME _____

Module 14 Graphing Quadratic Relations
Lesson 1 Graphing Simple Quadratic Relations

**additional
practice**

Find the equation of the axis of symmetry.

1. $y = x^2 + 2x + 1$ $x = -1$ _____

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

3. $y = 2x^2 + 8x - 2$ $x = -2$ _____

4. $y = 3x^2 - 6x + 2$ $x = 1$ _____

5. $y = 3x^2 + x - 5$ $x = -\frac{1}{6}$ _____

6. $y = 2x^2 - 5$ $x = 0$ _____

Identify the vertex.

7. $y = x^2 - 6x + 1$ $(3, -8)$ _____

8. $y = -x^2 + 2x + 1$ $(1, 2)$ _____

9. $y = 2x^2 - 4x + 3$ $(1, 1)$ _____

10. $y = 3x^2 - 6x + 1$ $(1, -2)$ _____

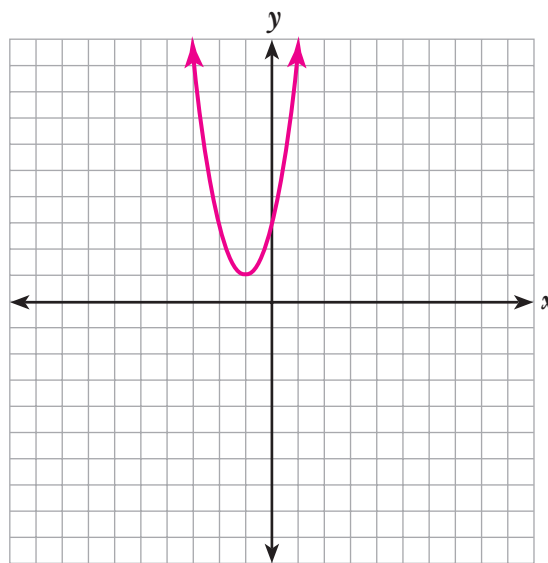
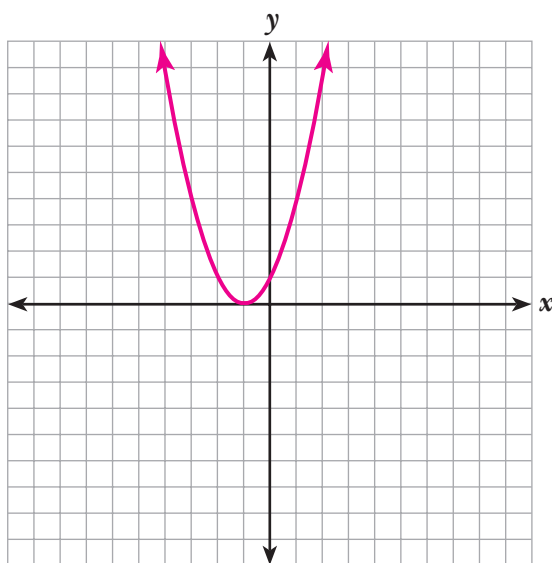
11. $y = -2x^2 - 8x + 5$ $(-2, 13)$ _____

12. $y = 5x^2 + 7$ $(0, 7)$ _____

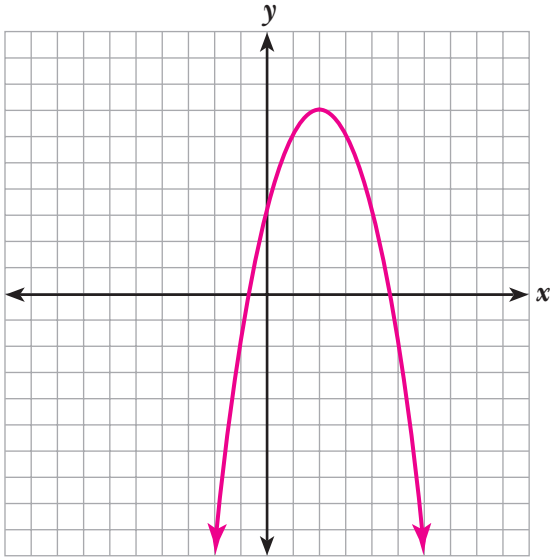
Graph.

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

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



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



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

