

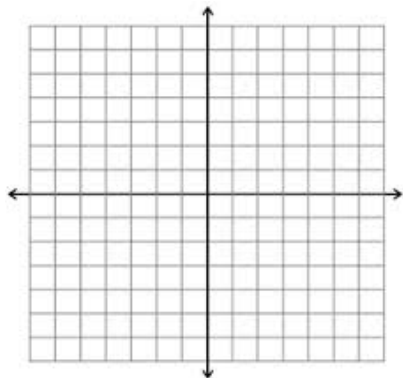
Name: _____
 Algebra 1

Date: _____
 Band: _____

Unit 8: Quadratic Functions & Equations PBA Practice

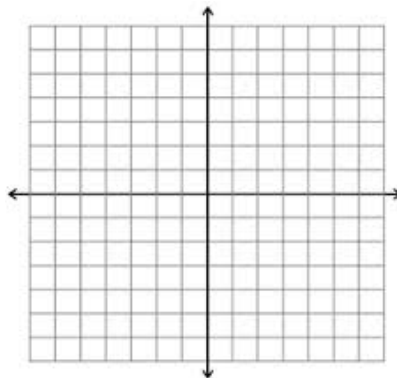
Graph *at least 5 points* of each function by making a table of values. Label the axis of symmetry and the vertex.

1. $y = \frac{2}{3}x^2$

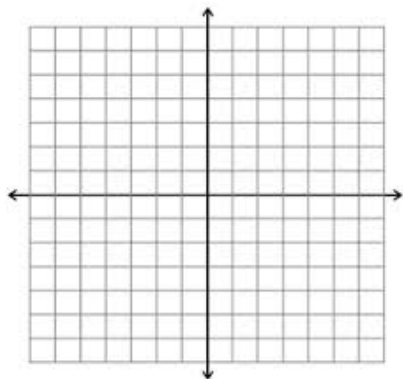


]

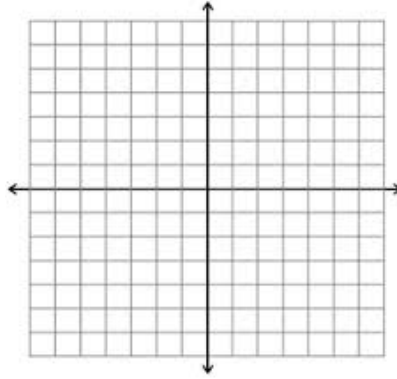
2. $y = -x^2 + 1$



3. $y = -\frac{1}{2}x^2 + 4x + 1$



4. $y = \frac{1}{2}x^2 + 2x - 3$



Solve each equation. If the equation has no real-number solution, *write no solution*.

5. $6(x^2 - 2) = 12$

6. $-5m^2 = -125$

7. $9(w^2 + 1) = 9$

8. $3r^2 + 27 = 0$

9. $4 = 9k^2$

10. $4n^2 = 64$

Solve by factoring.

11. $x^2 + 7x + 12 = 0$

12. $5x^2 - 10x = 0$

13. $2x^2 - 9x = x^2 - 20$

14. $2x^2 + 5x = 3$

15. $3x^2 - 5x = -3x^2 + 6$

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