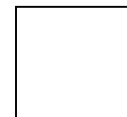


Name: _____

Unit 8: Quadratic Equations

Date: _____ Bell: _____

Homework 1: Intro to Quadratics



**** This is a 2-page document! ****

Complete the following statements.

1. The **standard form** of a quadratic equation is _____.
2. The **curve** formed by a quadratic equation is called a _____.
3. The formula for the **axis of symmetry** is _____.
4. If the **vertex** is the **highest point** on the graph, it is called a _____.
5. If a **vertex** is the **lowest point** on a graph, it is called a _____.

***Find the axis of symmetry and vertex for the following quadratic equations.
Then, sketch the parabola and label all parts.***

6. $y = x^2 + 6x + 4$

Axis of Symmetry: _____ Vertex: _____

Sketch:

7. $y = -2x^2 + 8x - 5$

Axis of Symmetry: _____ Vertex: _____

Sketch:

8. $y = x^2 - 2x$

Axis of Symmetry: _____ Vertex: _____

Sketch:

9. $y = -x^2 - 8x - 9$

Axis of Symmetry: _____ Vertex: _____

Sketch:

10. $y = -5x^2 - 20x - 26$

Axis of Symmetry: _____ **Vertex:** _____

Sketch:

11. $y = x^2 - 4$

Axis of Symmetry: _____ **Vertex:** _____

Sketch:

12. $y = -x^2 + 2x - 4$

Axis of Symmetry: _____ **Vertex:** _____

Sketch:

13. $y = -3x^2$

Axis of Symmetry: _____ **Vertex:** _____

Sketch:

14. $y = 2x^2 - 12x + 10$

Axis of Symmetry: _____ **Vertex:** _____

Sketch:

15. $y = x^2 + 10x + 24$

Axis of Symmetry: _____ **Vertex:** _____

Sketch: