

Trig/Precal Ch 1
Graphing Quadratic and Absolute Value Functions

Graph the following functions on a sheet of graph paper. Each function should have its own graph. Find and label the vertex, y intercept, and x intercepts.

$$1. \quad y = x^2 + 3$$

$$2. \quad y = -x^2 + 2$$

$$3. \quad y = (x - 4)^2$$

$$4. \quad y = (x - 3)^2 - 4$$

$$5. \quad y = -(x + 2)^2 + 1$$

$$6. \quad y = 2(x - 2)^2 - 9$$

$$7. \quad y = -3(x + 4)^2$$

$$8. \quad y = \frac{1}{2}(x - 2)^2 - 9$$

$$9. \quad y = |x + 3|$$

$$10. \quad y = -|x - 5| - 3$$

$$11. \quad y = |x + 2| - 4$$

$$12. \quad y = -|x - 2| + 3$$

$$13. \quad y = |x| - 5$$

$$14. \quad y = 2|x + 3| - 6$$

$$15. \quad y = -\frac{1}{4}|x| + 1$$

$$16. \quad y = -|x - 5|$$