

1. State the **quadratic formula** when given the standard form of a quadratic equation: $ax^2 + bx + c = 0$
2. Using the quadratic formula allows you to find which of the following from the graph of a quadratic function?
A. the vertex B. the axis of symmetry C. the y-intercept D. the x-intercepts
3. Which of the following is the **discriminant** of the quadratic formula?
A. $\frac{-b}{2a}$ B. $\sqrt{b-4ac}$ C. $b^2 - 4ac$ D. $\pm\sqrt{b^2 - 4ac}$
4. The value of the discriminant of a quadratic equation can be used to determine which of the following?
A. the vertex B. the number of real roots
C. if the graph is opening upward or downward D. the axis of symmetry

Use the Quadratic Formula to solve each equation.

5. $6x^2 + 19x + 8 = 0$

6. $x^2 - 2x - 11 = 0$

7. $x^2 - 2x - 15 = 0$

8. $3x^2 - 7x + 5 = 0$