


## Online ebook Notes

Directions: Access the Big Ideas Algebra 2 Student Dynamic ebook by signing into Clever ([clever.com/in/luhsd](https://clever.com/in/luhsd))

Navigate to **Section 3.4 on page 122**. View the tutorials by clicking on the blue play button 

Copy down notes for Monitoring Progress 1, 2, 4, 7, 9, 10, and Example 6.

### 3.4 Using the Quadratic Formula

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

#### Monitoring Progress

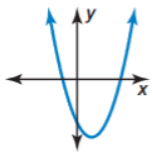
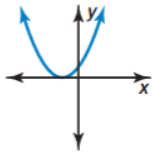
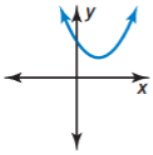
Solve the equation using the Quadratic Formula.

1.  $x^2 - 6x + 4 = 0$

2.  $2x^2 + 4 = -7x$

4.  $x^2 + 41 = -8x$

### Analyzing the Discriminant of $ax^2 + bx + c = 0$

Value of discriminant	$b^2 - 4ac > 0$	$b^2 - 4ac = 0$	$b^2 - 4ac < 0$
Number and type of solutions	Two real solutions	One real solution	Two imaginary solutions
Graph of $y = ax^2 + bx + c$	 Two $x$ -intercepts	 One $x$ -intercept	 No $x$ -intercept

### Monitoring Progress

Find the discriminant of the quadratic equation and describe the number and type of solutions of the equation.

7.  $4x^2 + 8x + 4 = 0$

9.  $5x^2 = 8x - 13$

10.  $7x^2 - 3x = 6$