

**10-4 Study Guide and Intervention*****Solving Quadratic Equations by Using the Quadratic Formula***

**Quadratic Formula** To solve the standard form of the quadratic equation,  $ax^2 + bx + c = 0$ , use the **Quadratic Formula**.

<b>Quadratic Formula</b>	the formula $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ that gives the solutions of $ax^2 + bx + c = 0$ , where $a \neq 0$
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SHOW ALL WORK ON LOOSE LEAF  
BOX ANSWERS  
BE NEAT  
DO NOT CROWD YOUR WORK INTO A SPACE  
THAT IS TOO SMALL FOR IT  
DO NOT RUN WITH SCISSORS  
EAT YOUR VEGETABLES

***Exercises***

Solve each equation by using the Quadratic Formula. Round to the nearest tenth if necessary.

1.  $x^2 - 3x + 2 = 0$

2.  $m^2 - 8m = -16$

3.  $16r^2 - 8r = -1$

4.  $x^2 + 5x = 6$

5.  $3x^2 + 2x = 8$

6.  $8x^2 - 8x - 5 = 0$

7.  $-4c^2 + 19c = 21$

8.  $2p^2 + 6p = 5$

9.  $48x^2 + 22x - 15 = 0$

10.  $8x^2 - 4x = 24$