Algebra 1 Bellwork Tuesday, May 5, 2015

Use the Quadratic Formula to solve each Quadratic Equation. Round to the nearest hundredth when necessary.

Quadratic Formula $x = \dfrac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

1. $9x^2 + 4 = 12x$

2. $2x^2 - 7x - 6 = 0$

3. $-5x^2 + 2x = 11$

4. $3x^2 - 31 = 0$

5. $2x^2 + 17x = 0$

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Quadratic Formula $x = \dfrac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

1. $9x^2 + 4 = 12x$

$9x^2 - 12x + 4 = 0$

$b^2 - 4ac = 0$

$x = \dfrac{12 \pm \sqrt{0}}{18} = \dfrac{12}{18}$

$x = 2/3$ or $x = 0.67$

2. $2x^2 - 7x - 6 = 0$

$b^2 - 4ac = 97$

$x = \dfrac{7 \pm \sqrt{97}}{4}$

$x = 4.21, -0.71$

3. $-5x^2 + 2x = 11$

$-5x^2 + 2x - 11 = 0$

$b^2 - 4ac = -216$

NO REAL SOL

4. $3x^2 - 31 = 0$

$b^2 - 4ac = 372$

$x = \dfrac{0 \pm \sqrt{372}}{6}$

$x = \pm 3.21$

5. $2x^2 + 17x = 0$

$b^2 - 4ac = 289$

$x = \dfrac{-17 \pm \sqrt{289}}{4}$

$x = 0, -8.50$