

Do Now

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

1) Find the zeros $x = \frac{-(19) \pm \sqrt{(19)^2 - 4(7)(-6)}}{2(7)}$

$f(x) = 7x^2 + 19x - 6$
 $0 = 7x^2 + 19x - 6$
 $a = 7$
 $b = 19$
 $c = -6$

$x = \frac{-19 \pm \sqrt{529}}{14} = \frac{-19 \pm 23}{14}$

$x = \frac{-19 + 23}{14} = \frac{4}{14} = \frac{2}{7}$

$x = \frac{-19 - 23}{14} = \frac{-42}{14} = -3$

2) Craig plans to wallpaper the longest wall in his living room. The wall is twice as long as it is high and has an area of 162 square feet. What is the height of the wall?

$A = lw$
 $162 = 2x(x)$
 $162 = 2x^2$
 $\frac{162}{2} = \frac{2x^2}{2}$
 $81 = x^2$
 $\pm 9 = x$

9 feet

$162 = 2x^2$
 $-162 = -162$
 $0 = 2x^2 - 162$
 $0 = 2(x^2 - 81)$
 $(x-9)(x+9)$

Mar 14-1:33 PM

HW Answers

1. $x = 2, 1$
2. $x = 0, \frac{8}{7}$
3. No Real Solution
4. $x = 2, 7$
5. $x = -1$
6. $x = -1$
7. All quadratic equations that have no real solutions will have a negative under the radical.

Tomorrow's Quiz

- Simplifying Radical Expressions
- Solving Quadratic Equations using Square Roots
- Solving Quadratic Equations using Factoring
- Finding the zeroes of a Quadratic Function
- Solving Quadratic Word Problems
- Solving Quadratics using the Quadratic Formula

$$\begin{array}{l} x-7 = \pm 7 \\ \begin{array}{l} + \\ x-7=7 \\ x=14 \end{array} \quad \begin{array}{l} - \\ x-7=-7 \\ x=0 \end{array} \end{array}$$

$$\sqrt{(x-7)^2} = \sqrt{49}$$

Mar 31-10:45 AM