

**Happy Monday!!!**

August 29

Do Now:

1) Take old warm-up and keep it :)

2) Solve.  $4(3-3) \cdot 6 = \underline{\hspace{2cm}}$   
 $(m-m) \cdot 2 \cdot 5 = \underline{\hspace{2cm}}$ 

$$1+1=2$$

Aug 29-7:15 AM

**Solve Quadratics by Factoring**

$$(x-3)(x+4)=0$$

$$(2x+1)(x-3)=0$$

$$(3x+1)(x-2)=0$$

Aug 29-9:28 AM

What about this?

$$x - 10x + 25 = 0$$

Factor, then solve.

Aug 29-9:33 AM

Discriminants and Solutions of Quadratic Equations		
Value of the Discriminant	Number of Solutions for $ax^2 + bx + c = 0$	$x$ -intercepts of Graph of Related Function $y = ax^2 + bx + c$
$b^2 - 4ac > 0$	two real solutions	two $x$ -intercepts
$b^2 - 4ac = 0$	one real solution	one $x$ -intercept
$b^2 - 4ac < 0$	no real solutions	no $x$ -intercepts

Aug 29-8:21 AM

$$ax^2 + bx + c = 0$$

Quadratic Formula:

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

$$x = \frac{-b + \sqrt{b^2 - 4ac}}{2a} \quad \text{and} \quad x = \frac{-b - \sqrt{b^2 - 4ac}}{2a}$$

Aug 29-9:34 AM

Solve using the Quadratic Formula

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

$$y = x^2 - 10x + 8$$

Aug 29-9:41 AM

**Quadratic Formula Songs**

Pop Goes the Weasel



One Direction

**Exit Slip****Solve by Factoring**

$$x^2 + 7x + 10 = 0$$

$$x = \underline{\hspace{2cm}}$$

$$x = \underline{\hspace{2cm}}$$

Aug 29-8:06 AM

Aug 29-8:12 AM

**Daily Math Practice****pg 245 11-22 odd**

Practice

Solve each equation using the Quadratic Formula.

See Problem 1.

11.  $x^2 - 4x + 3 = 0$

12.  $x^2 + 8x + 12 = 0$

13.  $2x^2 + 5x = 7$

14.  $3x^2 + 2x - 1 = 0$

15.  $x^2 + 10x = -25$

16.  $\frac{x^2}{4} - 5 = -3x$

17.  $x^2 = 3x - 1$

18.  $6x - 5 = -x^2$

19.  $3x^2 = 2(2x + 1)$

20.  $x(x - 1) = 3$

21.  $x(x - 5) = -4$

22.  $12x - 3x^2 = 5$

Aug 29-8:17 AM