Section 11.2—The Quadratic Formula

What is the STANDARD FORM of a QUADRATIC EQUATION?

What methods have I learned to SOLVE QUADRATIC EQUATIONS?

1.

When can this method be used?

2.

When can this method be used?

3.

When can this method be used?

What are the drawbacks of this method?

Is there another method that works ALL THE TIME?

The _____ formula works _____ the _____.

$$x = \frac{\pm\sqrt{\qquad\qquad}}{\qquad\qquad}$$

Make sure that the equation is in _____ _____

How do I SOLVE AN EQUATION USING THE QUADRATIC FORMULA?

$4x^2 + 5x - 6 = 0$

a =

b =

c =

Example $x^2 - x - 1 = 0$

How many solutions?

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

$3x^2 - 4x = -3$

When can I SIMPLIFY or REDUCE?

How can I TELL HOW MANY SOLUTIONS THERE WILL BE?

Discriminant:

If the discriminant is…	**You have these solutions**
POSITIVE and a PERFECT SQUARE…	
POSITIVE…	
ZERO…	
NEGATIVE…	

How do I FIND x & y-INTERCEPTS?

Find the x & y intercepts for $y = 2x^2 + 15x - 8$

Summary: