Tuesday, September 6th Homework on your desk!





Do Now:

- 1) Correct one problem from your formative assessment.
- 2) Write one thing you can improve on in this course, I want to help you succeed!

#### Common Mistakes:

1) Not taking the square root:

$$\sqrt{-25} = 25i$$

2) Leaving the square root:

$$\sqrt{-16} = i\sqrt{4}$$

3) Changing multiplication into addition:

$$-2\sqrt{-25} = -2 + 5i$$

4) Adding j plus j incorrectly:

$$5i + 4i = 9i^2$$

5) Turning addition into multiplication:

$$(2+3i) + (5-4i)$$
  
= 10 + 15i - 8i - 12i<sup>2</sup>

6) Forgetting to distribute the negative:

$$(3+4i) - (7+3i)$$
  
=  $3+4i-7+3i$ 

## Solving Quadratics with the Quadratic Formula

Do this anytime, but especially when you cannot factor. Make sure ALL terms are on one side of the equation.

$$x^2 + 5x - 10 = 0$$

$$3x^2 - 4x + 6 = 0$$

## **Learning Targets:**

Instructional Focus 1: I can factor and solve quadratics

Instructional Focus 2: I know and can use complex numbers

## Factoring:

- 1) Check for GCF
- 2) If four terms, factor by grouping
- 3) If three terms, factor using long or short abc
- 4) If two terms look for perfect squares.

**Exit Ticket** 

# What is the quadratic formula?