Algebra II

Section 5.9 Day 2

Operations with Complex Numbers

The Graphing Calculator

Nov 1-12:53 PM

$$f(x) = x^2 + 4x + 3$$

$$\begin{pmatrix} x & y \\ & \end{pmatrix}$$

(i^2)

Nov 5-11:43 AM

Bell Ringer
You and your classmates decide to sell sweatshirts and T-shirts to raise money for a school trip. You decide that you should sell at least fifteen items, but do not want to exceed 75 items. Based on a small survey of students, you also decide that the number of T-shirts should be at least twice the number of sweatshirts. Which system is the model?

A) S+T$\geq$75   B) S+T$\leq$75   C) S+T$\leq$75   D) S+T$\geq$75

   S+T$\geq$15   S+T$\leq$15   S+T$\geq$15   S-T$\geq$15

   T$\leq$2S   T$\geq$2S   T$\geq$2S   T$\leq$2S

Nov 1-12:55 PM

Today we are going to complete the problems we did yesterday using the Graphing Calculator.

Add, Subtract, or Multiply.

1. (8 - 3i)+(-3 - 7i)   2. (-1 + i) - (10 - 6i)

3. -2i(4 + 5i)   4. (3 + 2i)(-2 + 6i)

Nov 1-1:33 PM

Divide

1. $\dfrac{(5-2i)}{(3i)}$ $-\dfrac{2}{3}-\dfrac{5}{3}i$ 2. $\dfrac{(2+8i)}{(5-3i)}$

2nd Ans
Math 1 $-\dfrac{7}{17}+\dfrac{23}{17}i$

Simplify E

1. i^{54} 2. $\dfrac{-4}{5}i^{103}$

~~-1-4=-13i~~ $\dfrac{4}{5}i$

i

Conjugate

① 8 ⊕ 7i
   8 − 7i

② −4 ⊖ 3i
   −4 + 3i

Nov 1-1:38 PM   Nov 5-12:10 PM

Conclusion

1. **Any questions about the graphing calculator?**

2. **Any questions about complex numbers?**

3. **??????s**

Assignment

Wkst

You may use the calculator.

Complete what you can in class because you will have to do the rest by hand at home.

Nov 1-1:40 PM   Nov 1-1:41 PM