Name _____ Period _____

Algebra2/Trig WS 4.4-4.5 Mrs. Jensen

Simplify:

1. $\sqrt{-80}$	2. i^{39}	3. $i^3 \cdot i^5 \cdot i^{16}$
4. $\sqrt{-6} \cdot \sqrt{-12}$	5. $(9+7i)+(15-8i)$	6. $(8+4i)+(8-4i)$
7. $(8+4i)(7-3i)$	8. $(7i)^2(6i)$	9. $(6-4i)(6+4i)$

Find the values of x and y that make each equation true:

10. $15-28i=3x+(4y)i$

11. $7+x+(4y-10)i=3-6i$

Solve each equation using Square Root Property. (Remember to simplify imaginary)

1. $3x^2 + 3 = 0$	2. $5n^2 + 35 = 0$
3. $4m^2 + 76 = 0$	4. $-5m^2 - 65 = 0$
5. $2m^2 + 10 = 0$	6. $\frac{3}{4}x^2 + 12 = 0$

Solve following quadratic equation has been solved by completing the square. In the 2nd column, explain each step of the process used.

$2x^2 + 3x - 8 = 0$	

4.5

Solve each equations #1-2 by using the Square Root Property. Show all steps in your process.

1. $x^2 + x + \frac{1}{4} = \frac{9}{16}$

2. $9x^2 - 6x + 1 = 2$

Solve equations #3-4 by completing the square. Show all steps in your process.

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

4. $x^2 - 14x + 19 = 0$