**Honors Math 2**

**Unit 2 Simplifying Radicals, Intro to Imaginary Numbers &**

**Solving Quadratic Equations by Using Square Roots**

**Warm Up: Factor Completely**

1. x2 + 12x + 36 2. x2 – 8x + 16 3. 2x2 – 36x + 162

**Write each radical in simplest radical form.**

1.  2.  3.  4. 

**Imaginary numbers**

**What is an imaginary number? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Example:

Simplify.

1.  2.  3. 

4.  5.  6. 

7.  8.  9. 

**Review:** Solve by factoring: **x2 = 4**

**Solve the following equations by taking the square root of both sides.**

**1.** x2 = 4 **2.** x2 = 8

**3.** 7x2 = -21 **4.** 8n2 – 6 = 306

**5.**  -2x2 + 162 = 0 **6.** 4(y – 3) 2 = 16

**7.** (y + 1) 2 = 12 **8.**  5(x – 3)2 = -20

**Can we make these problems look like the ones above???**

**9**. x2 – 10x + 25 = 0 **10**. x2 + 14x + 49 = 50

**11**. 2x2 + 12x + 18 = 64 **12.** 3x2 – 12x + 12 = 33