Lesson 6.1 – Order of Operations

**Standard:** *A.F. 1.4*– Solve problems manually by using the correct order of operations or by using a scientific calculator.

**Content Objective (Know):** I will know how to solve multiple step equations using order of operations.

**Language Objective (Do):** I will demonstrate how to solve multiple step equations using order of operations by solving multiple problems, written on my whiteboard.

**Vocabulary:**

**Order of Operations** –The order in which mathematicians use to solve problems with multiple operations.

**Example –**

**P -**

**E -**

**MD -**

**AS -**

**Example 1: Use order of operations to solve:**

**1.) 25- 6-14+3 2.) 8+12** $÷$ **(-2) - 3 3.) 16**$÷$ **2 x** $\frac{1}{2}$

**Example 2: Use order of operations to solve: Grouping Symbols**

**4.) (3+7)**$(6-3)^{2}$

**Step 1: Add or subtract within the grouping (Parenthesis)**

**Step 2: Solve the exponent**

**Step 3: Multiply both numbers in the parenthesis together.**

**5.)**$\frac{13+7}{2 x 5}$

***Step 1: If a fraction then the numbers are grouped by the fraction bar (do all***

***addition/subtraction/multiplication above and below the fraction bar first.***

**Step 2: Divide the sum/product of the numerator (TOP of the fraction) by the denominator (BOTTOM of the Fraction).**

**CFU – Whiteboard**

1.) 6+7 x 4 2.)36 $÷$ 3 -$ 2^{3}$ 3.) -7 (32 - 24)

4.)$\frac{24-32-8}{21-29}$ 5.) $\frac{3}{4}$ (25 $÷$ 5)

Practice – Text Book Pg 166 - #’s 4-30 (Even)