Lesson 2.1 – Compare and Order Fractions and Mixed Numbers

**Standard:** *Number Sense 1.1*– Compare and order positive and negative fractions, decimals, and mixed numbers and place them on a number line.

**Objective:** Students will be able to find common denominators and rename

fractions. Then use these new fractions to order and compare.

**Vocabulary:**

**Common Multiple (Denominators) -** A quantity into which each of two or more quantities may be divided with zero remainder

**Example** - Multiples of 2 are 2, 4, **6**, 8, 10, **12**, 14, 16, **18**, …

Multiples of 3 are 3, **6**, 9, **12**, 15, **18**, …

**Least Common Multiple (Denominator) –**

**Example 1: Compare. and using common multiples**

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| **Step 1**: Write the multiples of the denominators and then find the common  multiples.  Multiples of 4:  Multiples of 3:  **\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_ are common multiples of the denominators.** |
| **Step 2**: Use common multiple (denominator) Rename the fraction so they have common denominators.  can be renamed as x =  can be renamed as x = |
| **Step 3:** Now that the denominators are the same compare the numerators. Which is bigger? |

**Example 2: Compare. and using cross multiply**

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| **Step 1**: Multiple the denominators to make a common denominator.  x = |
| **Step 2**: Multiply the denominator with the opposite numerator.  =  **=** |
| **Step 3:** Now that the denominators are the same compare the numerators. Which is bigger? |

**Example 3: Order fractions from least to greatest , ,**

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| **Step 1**: Find the LCM (LCD) of the denominators **3, 8, & 6.**  **(Factor tree or lists)** |
| **Step 2**: Use the LCM (LCD) to write equivalent fractions. |
| **Step 3:** Now that the denominators are the same compare the numerators. Which is bigger? |

**Whiteboard – CFU**

**Compare. Write <, > or = for each. Show Work**

1.) 2.) 3.)

**Write in order from least to greatest**

4.) , 5.) ,