Lesson 4.2 – Dividing Fractions and mixed numbers

**Standard:** *Number Sense 2.1*– Solve problems involving addition, subtraction, multiplication, and division of positive fractions and explain why a particular operation was used for a given situation.

**Content Objective (Know):** I will know how to divide fractions and mixed numbers.

**Language Objective (Do):** I will write the steps to dividing a mixed number on the back of my notes.

**Vocabulary:**

**Reciprocal** – A fraction that is flipped upside down.

**Example** - $\frac{1}{3}$ = $\frac{3}{1}$

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| Fraction | Reciprocal |
| $$\frac{1}{3}$$ |  |
| $$\frac{2}{3}$$ |  |
| $$\frac{3}{8}$$ |  |
| $$\frac{4}{5}$$ |  |
| 1$\frac{1}{3}$ |  |
| $$3\frac{1}{3}$$ |  |

**Example 1: Divide fractions** $\frac{5}{9}$ $÷$ $\frac{7}{9}$

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| **Step 1**: Make the second fraction a reciprocal $\frac{9}{7}$**Step 2**: Rewrite the problem as a multiplication problem**Step 3**: Multiply the denominators.**Step 4**: Multiply the numerators.**Step 5**: Convert improper fractions into mixed numbers if possible.**Step 6**: Simplify if necessary. |

**Whiteboard – CFU**

1. $\frac{9}{2}$ $÷\frac{3}{2}$ **2.)**$ \frac{1}{6}$ $÷3$ **3.)** 4$÷\frac{2}{3}$

**Example 2: Divide mixed numbers** $2\frac{5}{6}$ $÷7$

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| **Step 1**: Make all mixed numbers = improper fractions**Step 2**: Make the second fraction a reciprocal $\frac{9}{7}$**Step 3**: Rewrite the problem as a multiplication problem**Step 4**: Multiply the denominators.**Step 5**: Multiply the numerators.**Step 6**: Convert improper fractions into mixed numbers if possible.**Step 7**: Simplify if necessary. |

**CFU - Practice:**

**1.)10** $÷1\frac{1}{6}$ **2.)** $\frac{8}{9}$ $÷1\frac{2}{15}$ **3.)** $3\frac{3}{5}$ $÷\frac{12}{25}$

**4.)**$ 10\frac{2}{7}$ $÷4\frac{4}{11}$ **5.)**$ 4\frac{3}{8}$ $÷3\frac{1}{3}$ **6.)** $15\frac{3}{4}$ $÷5\frac{5}{7}$