Name _____ Date _____

Lesson 7.7

Essential Question: How can you add and subtract mixed numbers with like denominators?

To add or subtract mixed numbers with the same denominator,

Step 1: Add or subtract the fractional parts.

Step 2: Add or subtract the whole number parts.

Step 3: If the fraction part is an improper fraction, you need to rename it or divide to turn it into a mixed number.

Step 4: Add the sum of the whole number part with the whole number from the mixed number. Then write it with the fraction part left over.

Ex.
$$2 \frac{3}{6}$$
$$+ 1 \frac{5}{6}$$
$$\overline{\quad}$$

$$6 \frac{4}{10}$$
$$- 2 \frac{3}{10}$$
$$\overline{\quad}$$

$$7 \frac{4}{8}$$
$$+ 3 \frac{5}{8}$$
$$\overline{\quad}$$

step 1 and 2:
$$3 \frac{8}{6}$$

change $\frac{8}{6}$ into $1 \frac{2}{6}$

Step 3:
$$\begin{array}{r} 1\frac{2}{6} \\ 6\overline{)8} \\ -6 \\ \hline 2 \end{array}$$

Step 4:
$$3 + 1\frac{2}{6} = 4\frac{2}{6}$$
$$\vee$$
$$4$$

4 NFA.1   I can use the least common multiple to find common denominators   6.4

A common denominator is a common multiple of the denominators of two or more fractions.

How can you find common denominators?

1. Identify the denominators in the two or more fractions.

2. List the multiples of BOTH denominators.

3. Circle the common multiples. Use the **least common multiple (LCM)** to find an equivalent fraction for each of the original fractions in your question.

Ex: $\dfrac{1}{5}$ and $\dfrac{2}{3}$ Multiples of 5: **5, 10, 15, 20, 25**

Multiples of 3: **3, 6, 9, 12, 15, 18**

$$\frac{1}{5} = \frac{3}{15} \qquad\qquad \frac{2}{3} = \frac{10}{15}$$