

## Problem of the Day

Main Street is  $\frac{4}{5}$  km long. Maple Ave intersects Main Street after  $\frac{3}{8}$  km. What is the remaining length of Main Street after the Maple Ave intersection?

12/15/09

Objective:

TSWBAT subtract mixed numbers and mixed numbers with renaming

## Subtracting Mixed Numbers

Steps for subtracting mixed numbers:

$$3\frac{3}{4} - 2\frac{5}{8}$$

1. find the LCD

$$\frac{3 \times 2}{4 \times 2} = \frac{6}{8} \qquad \frac{5}{8}$$

2. Subtract the whole numbers

$$3 - 2 = 1$$

3. subtract the fractions

$$\frac{6}{8} - \frac{5}{8} = \frac{1}{8} \Rightarrow 1\frac{1}{8}$$

4. simplify if possible

## Renaming Whole Numbers

Steps for renaming with whole numbers:

$$7 - 2\frac{5}{8}$$

1. rename 7 as a mixed number with a fraction that equals 1.

$$7 = 6\frac{8}{8} \quad \text{your new mixed number is } 6\frac{8}{8}$$

2. subtract the whole numbers.

$$6 - 2 = 4$$

3. subtract the fractions.

$$\frac{8}{8} - \frac{5}{8} = \frac{3}{8} \rightarrow 4\frac{3}{8}$$

4. simplify if possible.

## Renaming Mixed Numbers

### Steps for Renaming Mixed Numbers

$$11\frac{1}{6} - 5\frac{2}{3}$$

1. rename  $11\frac{1}{6}$  as  $10 + 1\frac{1}{6} = 10\frac{7}{6}$

$11 = 10\frac{6}{6}$  now add the original fraction to  $10\frac{6}{6} + \frac{1}{6} = 10\frac{7}{6}$

2. find the LCD

$$\frac{7}{6}$$

$$\frac{2 \times 2}{3 \times 2} = \frac{4}{6}$$

3. subtract

$$10\frac{7}{6} - 5\frac{4}{6} = 5\frac{3}{6}$$

4. simplify if possible

$$5\frac{3 \div 3}{6 \div 3} =$$

$$5\frac{1}{2}$$

**Practice:**

**Homework:**  
**Reteach 4-5**