Name _____

Rename Mixed Numbers to Subtract

I Can use renaming to find the difference of two mixed numbers.

Florida's B.E.S.T.
- **Fractions** 5.FR.2.1
- **Algebraic Reasoning** 5.AR.1.2
- **Mathematical Thinking & Reasoning** MTR.1.1, MTR.2.1, MTR.3.1

UNLOCK the Problem Real World

To practice for a race, Kara is running $2\frac{1}{2}$ miles. When she reaches the end of her street, she knows that she has already run $1\frac{5}{6}$ miles. How many miles does Kara have left to run?

- Underline the sentence that tells you what you need to find.
- What operation should you use to solve the problem?

_____

One Way Rename the first mixed number.

Subtract. $2\frac{1}{2} - 1\frac{5}{6}$

STEP 1 Estimate the difference. _____

STEP 2 Find a common denominator. Use the common denominator to write equivalent fractions with like denominators.

STEP 3 Since $\frac{6}{12}$ is less than $\frac{10}{12}$, rename $2\frac{6}{12}$ as a mixed number with a fraction greater than 1.

Think: $2\frac{6}{12} = 1 + 1 + \frac{6}{12} = 1 + \frac{12}{12} + \frac{6}{12} = 1\frac{18}{12}$

$2\frac{6}{12} =$ _____

STEP 4 Find the difference of the fractions. Then find the difference of the whole numbers. Check to make sure your answer is reasonable.

$2\frac{1}{2} = 2\frac{6}{12} =$

$-1\frac{5}{6} = -1\frac{10}{12} = -1\frac{10}{12}$

So, Kara has _____ mile left to run.

- **MTR** Explain why it is important to write equivalent fractions before renaming. _____

_____

Another Way Rename both mixed numbers as fractions greater than 1.

Subtract. $2\frac{1}{2} - 1\frac{5}{6}$

STEP 1 Write equivalent fractions, using a common denominator.

A common denominator of $\frac{1}{2}$ and $\frac{5}{6}$ is 6.

$2\frac{1}{2} \longrightarrow$ ☐

$1\frac{5}{6} \longrightarrow$ ☐

STEP 2 Rename both mixed numbers as fractions greater than 1.

$2\frac{3}{6} =$ ☐ **Think:** $\frac{6}{6} + \frac{6}{6} + \frac{3}{6}$

$1\frac{5}{6} =$ ☐ **Think:** $\frac{6}{6} + \frac{5}{6}$

STEP 3 Find the difference of the fractions.

☐ − ☐ = ☐ ☐

$2\frac{1}{2} - 1\frac{5}{6} =$ _____

Share and Show Math Board

Estimate. Then find the difference.

1. Estimate: _____

$4\frac{1}{2} - 3\frac{4}{5}$

2. Estimate: _____

$9\frac{1}{6} - 2\frac{3}{4}$

Math Talk

MTR 4.1 Engage in discussions on mathematical thinking.

Explain the strategy you could use to solve $3\frac{1}{9} - 2\frac{1}{3}$.