

Name _____

Add and Subtract Mixed Numbers with Unlike Denominators

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, MTR.6.1

I Can add and subtract mixed numbers with unlike denominators.



UNLOCK the Problem Real World

Denise mixed $1\frac{4}{5}$ ounces of blue paint with $2\frac{1}{10}$ ounces of yellow paint. How many ounces of paint did Denise mix?



Add. $1\frac{4}{5} + 2\frac{1}{10}$

To find the sum of mixed numbers with unlike denominators, you can use a common denominator.

STEP 1 Estimate the sum. _____

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

STEP 3 Add the fractions. Then add the whole numbers.

So, Denise mixed _____ ounces of paint.

- What operation should you use to solve the problem?

- Do the fractions have the same denominator?

$$\begin{array}{r} 1\frac{4}{5} = \square \\ + 2\frac{1}{10} = + \square \\ \hline \square \end{array}$$

Math Talk

MTR 4.1 Engage in discussions on mathematical thinking.

How did you find the common denominator?

1. **MTR** Explain how you know whether your answer is reasonable.

2. What other common denominator could you have used? _____

Examples

Subtract. $4\frac{5}{6} - 2\frac{3}{4}$

You can also use a common denominator to find the difference of mixed numbers with unlike denominators.

STEP 1 Estimate the difference. _____

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

STEP 3 Subtract the fractions. Subtract the whole numbers.

$$\begin{array}{r} 4\frac{5}{6} = \boxed{} \\ - 2\frac{3}{4} = - \boxed{} \\ \hline \boxed{} \end{array}$$

3. **MTR** Explain how you know whether your answer is reasonable.

Share and Show



1. Use a common denominator to write equivalent fractions with like denominators and then find the sum.

$$\begin{array}{r} 7\frac{2}{5} = \boxed{} \\ + 4\frac{3}{4} = + \boxed{} \\ \hline \boxed{} \end{array}$$

Find the sum.

2. $2\frac{3}{4} + 3\frac{3}{10}$

3. $5\frac{3}{4} + 1\frac{1}{3}$

4. $3\frac{4}{5} + 2\frac{3}{10}$