Unit 6, Lesson 9

Use Expressions with the Same Value

Let's use expressions with the same value to add and subtract fractions with unlike denominators.

Warm-up

True or False: Fraction Addition and Subtraction

Decide if each statement is true or false. Be prepared to explain your reasoning.

- $\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$

- $\frac{1}{2} + \frac{1}{4} = \frac{2}{4}$

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

Activity 1

Sums with the Same Value

1. Why is each expression equivalent to $\frac{2}{3} + \frac{10}{12}$? Explain or show your reasoning.
   - $\frac{8}{12} + \frac{10}{12}$
   - $\frac{4}{6} + \frac{5}{6}$

2. Find the value of the expression $\frac{2}{3} + \frac{10}{12}$. Explain or show your reasoning.

Activity 2

Find the Value of the Difference

1. Find the value of the expression $\frac{16}{12} - \frac{3}{6}$. Explain or show your reasoning.

2. Compare strategies with a partner. How are they alike? How are they different?

Activity 3

Grow Plants

Jada and Andre compare the growth of their plants. Jada's plant grew $1\frac{3}{4}$ inches since last week. Andre's plant grew $\frac{7}{8}$ inch. How much more did Jada's plant grow? Explain or show your reasoning.