Lesson 9: Use Equivalent Expressions

- Let's use equivalent expressions 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.

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

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

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

9.1: Equal Sums

1. Explain or show why each expression is equivalent to $\frac{2}{3} + \frac{10}{12}$.

- $\frac{8}{12} + \frac{10}{12}$

- $\frac{4}{6} + \frac{5}{6}$

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

9.2: 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 your strategy with your partner's strategy. What is the same? What is different?

9.3: 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 $\frac{7}{8}$ inches. How much more did Jada's plant grow? Explain or show your reasoning.