## 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.



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