

Adding / Subtracting Fractions

1. Determine if the fractions have the same denominator.

$$\frac{7}{6} - \frac{2}{6} = \frac{5}{6} \quad \checkmark \quad \text{OK to add or subtract}$$

$$\frac{9}{8} + \frac{7}{12} = \quad \times \quad \text{LCD Required}$$

2. If the fractions have different denominators, the least common denominator must be determined.

$$\frac{9}{\textcircled{8}} + \frac{7}{\textcircled{12}} =$$

LCM of 8 and 12:

$\begin{array}{ccc} x1 & x2 & x3 \\ 8: & 8, 16, & 24 \end{array}$

$\begin{array}{ccc} & x1 & x2 \\ 12: & 12, & 24 \end{array}$

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3. Multiply the numerator and denominator of both fractions by the number of times required to make the denominator equal to the least common denominator.

$$\frac{3}{3} \cdot \frac{9}{8} + \frac{7}{12} \cdot \frac{2}{2} = \frac{27}{24} + \frac{14}{24}$$

4. Add or subtract the numerator of the fractions; the denominator remains the same. Simplify the final fraction if possible.

$$\frac{27}{24} + \frac{14}{24} = \frac{41}{24}$$