Adding / Subtracting Fractions

1. Determine if the fractions have the same denominator.

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

$$\frac{9}{8} + \frac{7}{12} =$$ ✗ LCD Required

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

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

LCM of 8 and 12 :

8 : 8 (x1), 16 (x2), 24 (x3)

12 : 12 (x1), 24 (x2)

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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. (DO NOT SIMPLIFY)**

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

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

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