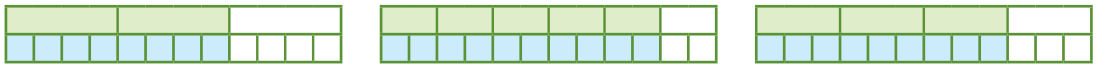
Adding and Subtracting Fractions with Different Denominators

$$\frac{2}{3} + \frac{5}{6} + \frac{3}{4} = \frac{27}{12}$$

$\frac{2}{3}$ $\xrightarrow{\times 4}$ $\frac{8}{12}$ $\xleftarrow{\times 4}$

$\frac{5}{6}$ $\xrightarrow{\times 2}$ $\frac{10}{12}$ $\xleftarrow{\times 2}$

$\frac{3}{4}$ $\xrightarrow{\times 3}$ $\frac{9}{12}$ $\xleftarrow{\times 3}$



Convert the fractions so that they have the same denominator by finding a common multiple of the denominators. Then, add or subtract the numerators.

1) $\frac{3}{5} + \frac{5}{6} + \frac{1}{3}$

$\frac{3}{5}$ $\xrightarrow{\times\ \square}$ $\frac{\square}{30}$ $\xleftarrow{\times\ \square}$

$\frac{5}{6}$ $\xrightarrow{\times\ \square}$ $\frac{\square}{30}$ $\xleftarrow{\times\ \square}$

$\frac{1}{3}$ $\xrightarrow{\times\ \square}$ $\frac{\square}{30}$ $\xleftarrow{\times\ \square}$

$$\frac{\square}{30}$$

2) $\frac{5}{6} - \frac{1}{9}$

$$\frac{\square}{18} - \frac{\square}{18} = \frac{\square}{18}$$

3) $\frac{7}{8} + \frac{11}{12} + \frac{2}{4}$

$$\frac{\square}{24} + \frac{\square}{24} + \frac{\square}{24} = \frac{\square}{24}$$

4) $\frac{4}{8} - \frac{1}{7}$

$$\frac{\square}{\square} - \frac{\square}{\square} = \frac{\square}{\square}$$

5) $\frac{4}{9} + \frac{1}{6} + \frac{3}{4}$

$$\frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square} = \frac{\square}{\square}$$