

Adding + Subtracting fractions

Vocab $\frac{3}{4}$ → numerator
4 → denominator

mixed number $1\frac{1}{2}$ improper $\frac{4}{3}$

Examples

① with common denominators

$$\frac{2}{8} + \frac{4}{8} = \frac{6 \div 2}{8 \div 2} = \left(\frac{3}{4}\right) * \text{simplest form}$$

② uncommon denominators

$$\frac{4}{5} - \frac{1}{3} = \frac{4 \times 3}{15} - \frac{1 \times 5}{15} = \frac{12}{15} - \frac{5}{15} = \left(\frac{7}{15}\right)$$

$$\begin{array}{r|l} 5 & 3 \\ \hline \times 3 & 5 \quad 3 \\ & 10 \quad 6 \\ & \textcircled{15} \quad 9 \quad \times 5 \\ & \hline & \textcircled{15} \end{array}$$

③ with whole + mixed numbers

$$11 - 8\frac{2}{3} = \frac{11}{1} - 8\frac{2}{3} = \frac{33}{3} - \frac{26}{3} = \frac{7}{3} = \boxed{2\frac{1}{3}}$$

* Always Always turn mixed numbers into improper!! Every time.