

ADDING & SUBTRACTING RATIONAL NUMBERS

$$\frac{3}{4}$$

← numerator

← denominator

- To add/subtract fractions, the denominators must be the same.

$$\frac{3}{8} + \frac{2}{8} = \frac{5}{8}$$

← add the numerators

↑ Same denominator

$$\frac{2}{7} - \frac{5}{7} = -\frac{3}{7}$$

• If the denominators are not the same, multiply one (or both) fractions by a common factor so the denominators can be the same.

$$\frac{4}{4} \cdot \frac{1}{3} + \frac{5}{12} \quad \left. \vphantom{\frac{4}{4}} \right\} 4 \times 3 = 12$$

$$\frac{4}{12} + \frac{5}{12} = \frac{9}{12}$$

$$\boxed{= \frac{3}{4}}$$

$$\frac{5}{5} \cdot \frac{3}{7} + \frac{1}{5} \cdot \frac{7}{7}$$

$$\frac{15}{35} + \frac{7}{35} = \frac{22}{35}$$