

Operations with FRACTIONS

ADDITION + Subtraction

Common denominator

$$\frac{2}{9} + \frac{5}{9} = \frac{7}{9}$$

Multiplication

Multiply the numerator and denominator

$$\frac{3}{5} \times \frac{10}{8} = \frac{30}{40}$$

Division

Keep Change Flip

$$\frac{3}{4} \div \frac{2}{3} = \frac{3}{4} \times \frac{3}{2}$$

Addition

$$\frac{1}{4} + \frac{3}{8} =$$

If the denominators are different, first find a common denominator.

$$\left[\frac{1}{4} \times \frac{2}{2}\right] + \frac{3}{8} =$$

Then add or subtract the numerators.

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

The denominators stay the same.

Subtraction

$$\frac{5}{6} - \frac{3}{4} =$$

If the denominators are different, first find a common denominator.

$$\left[\frac{5}{6} \times \frac{2}{2}\right] - \left[\frac{3}{4} \times \frac{3}{3}\right] =$$

Then add or subtract the numerators.

$$\frac{10}{12} - \frac{9}{12} = \frac{1}{12}$$

Multiplication

$$\frac{3}{4} \times \frac{4}{5} = \frac{12}{20} = \frac{3}{5}$$

Multiply the numerators.

Multiply the denominators.

Reduce.

Remember to Reduce!

Division

$$\frac{4}{5} \div \frac{5}{6} =$$

First, invert the divisor.

Multiply the numerators.

$$\frac{4}{5} \times \frac{6}{5} = \frac{24}{25}$$

Multiply the denominators.

For all operations, reduce or simplify when possible