

# Fractions

## Adding and Subtracting Fractions

Like denominators: add or subtract the numerators.

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

$$\frac{7}{10} - \frac{3}{10} =$$

Unlike denominators: make common denominators first.

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

$$\frac{5}{6} - \frac{1}{4} =$$

$$\frac{2}{5} + \frac{1}{10} - \frac{1}{2} =$$

$$\frac{3}{4} - \frac{1}{6} + \frac{1}{12} =$$

## Multiplying and Dividing Fractions

Multiply straight across. To divide, multiply by the reciprocal.

$$\frac{2}{3} \cdot \frac{9}{10} =$$

$$\frac{3}{5} \div \frac{9}{10} =$$

$$\frac{5}{8} \cdot \frac{4}{15} =$$

$$\frac{7}{12} \div \frac{14}{15} =$$

$$\frac{4}{9} \cdot \frac{3}{8} =$$

$$\frac{5}{6} \div \frac{10}{9} =$$

## Finding a Fraction of a Number

The word “of” usually means multiply.

$$\frac{1}{12} \text{ of } 48 =$$

$$\frac{2}{3} \text{ of } 27 =$$

$$\frac{3}{4} \text{ of } 36 =$$

$$\frac{5}{8} \text{ of } 40 =$$

$$\frac{7}{10} \text{ of } 90 =$$

$$\frac{2}{5} \text{ of } 60 =$$

## Exponents and Square Roots with Fractions

Apply the exponent or square root to the numerator and denominator.

$$\left(\frac{2}{3}\right)^2 =$$

$$\left(\frac{3}{4}\right)^3 =$$

$$\sqrt{\frac{36}{49}} =$$

$$\sqrt{\frac{81}{100}} =$$

$$\left(\frac{5}{6}\right)^2 =$$

$$\sqrt{\frac{16}{25}} =$$