

3.6 Adding & Subtracting Unlike Fractions

Adding & Subtracting Unlike Fractions

To find the sum or difference of two fractions with unlike denominators, rename the fractions with a common denominator. Then add or subtract & simplify.

Reminder: Use the least common denominator (LCD) method to rename the fractions with a common denominator.

3.6 Adding & Subtracting Unlike Fractions

Example: Solve each equation. Write the solution in simplest form.

LCD: 24

$$\left(-\frac{1 \cdot 8}{3 \cdot 8}\right) + \frac{3 \cdot 3}{8 \cdot 3}$$

$$\frac{-8}{24} + \frac{9}{24} = \boxed{\frac{1}{24}}$$

3.6 Adding & Subtracting Unlike Fractions

Example: Solve each equation. Write the solution in simplest form.

LCD: 15

$$\frac{9 \cdot 3}{5 \cdot 3} + \left(-\frac{4 \cdot 5}{3 \cdot 5} \right)$$

$$\frac{27}{15} + \frac{-20}{15} = \boxed{\frac{7}{15}}$$

3.6 Adding & Subtracting Unlike Fractions

Example: Solve each equation. Write the solution in simplest form.

LCD: 6

$$\left(-\frac{4 \cdot 2}{3 \cdot 2} \right) - \left(-\frac{3 \cdot 3}{2 \cdot 3} \right)$$

$$\frac{-8}{6} + \frac{9}{6} = \frac{-8}{6} + \frac{9}{6} = \boxed{\frac{1}{6}}$$

3.6 Adding & Subtracting Unlike Fractions

Example: Solve each equation. Write the solution in simplest form.

LCD: 40

$$\frac{9 \cdot 8}{5 \cdot 8} - \frac{5 \cdot 5}{8 \cdot 5}$$

$$\frac{72}{40} - \frac{25}{40} = \boxed{\frac{47}{40} \text{ or } 1 \frac{7}{40}}$$

3.6 Adding & Subtracting Unlike Fractions

Example: Solve each equation. Write the solution in simplest form.

LCD: 8

$$\frac{2 \cdot 8}{1 \cdot 8} - \frac{13}{8}$$

$$\frac{16}{8} - \frac{13}{8} = \boxed{\frac{3}{8}}$$