

Adding and Subtracting Rational Expressions—Part 1

When adding or subtracting fractions that have the same denominator:

1. Keep the denominator and collect like terms in the numerators.
2. Try to reduce the expression by factoring.

Directions:

Perform the indicated operations and reduce to lowest terms.

$$1. \frac{25}{3x} - \frac{4}{3x}$$

$$2. \frac{3x+1}{5x-2} + \frac{4x-6}{5x-2}$$

$$3. \frac{x^2}{2x+3} - \frac{x+6}{2x+3}$$

$$4. \frac{5}{x-2} - \frac{6}{2-x}$$

OPPOSITE DENOMINATORS

$$5. \frac{x}{y-3} + \frac{5x}{3-y}$$

$$6. \frac{3x^2-7}{x-4} + \frac{x^2-2x+12}{4-x}$$