Rational Equations 9-5

Rational Equation

Solve.

1. $\frac{24}{r-3} = \frac{36}{r+3}$

2. $\frac{4}{x-1} = \frac{x+1}{12}$

When addition/subraction of rational expressions is involved:

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

STEP 1: Find the LCD

STEP 2: Multiply each term by the LCD
STEP 3: Simply each rational expression
STEP 4: Solve

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

5. $\frac{3m+2}{5m} + \frac{2m-1}{2m} = 4$

Rational Equations 9-5

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

7. $\frac{x+2}{2x+1} = \frac{x}{3} + \frac{3}{4x+2}$

8. $\frac{x}{x-2} + \frac{4}{x-2} = 10$

9. $\frac{10}{m^2-1} + \frac{2m-5}{m-1} = \frac{2m+5}{m+1}$