

Polynomial Functions – Rational Equations and Inequalities

Solve each equation. Check your solution.

1. $c - \frac{4}{c} = 3$

2. $\frac{1}{2n} + \frac{6n-9}{3n} = \frac{2}{n}$

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

4. $\frac{15}{s} - s + 8 = 10$

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

6. $\frac{3}{d+5} + \frac{2}{d-1} = 1$

Solve each inequality.

7. $\frac{6}{t} + 3 > \frac{2}{t}$

8. $\frac{2n+1}{3n+1} < \frac{n-1}{3n+1}$

9. $1 + \frac{3y}{y-1} > 2$

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

11. $\frac{x-5}{x^2-5x+6} > 0$