

Solving Rational Equations

Homework

Solve for x. Check for extraneous solutions.

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

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

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

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

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

6. $\frac{3}{x-2} + \frac{2x}{x^2-4} = \frac{16}{x+2}$

7. $\frac{7}{x+5} - \frac{2}{x-2} = \frac{3}{x^2+3x-10}$

8. $\frac{x}{2x+1} - \frac{2}{x-1} = \frac{x+2}{2x^2-x-1}$

9. $\frac{2}{x^2+4x+3} + \frac{1}{x+3} = \frac{3}{x+1} - \frac{5}{x^2+6x+9}$

10. $\frac{2x}{4} + \frac{5}{x} = \frac{7}{x}$

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

12. $\frac{-4}{x-1} + \frac{2}{x^3-1} = \frac{8}{x^2+x+1}$

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

