

Solving Rational Equations-Answers

Solve It- Clear, Factor, Cancel Handout

1. Solve $\frac{1}{x+10} = \frac{2}{x+4}$.
 $x = -16$

2. Solve $\frac{1}{x+3} = \frac{x-1}{12}$.
 $x = -5$ and $x = 3$

3. Solve $\frac{2}{x^2-1} + \frac{2}{x^2+x-2} = \frac{3}{x^2+3x+2}$.
 $x = -9$

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

5. Solve $\frac{2}{x^2-1} + \frac{1}{x+1} = x - 1$.
 $x = 0$ and $x = 2$ ($x = -1$ is an extraneous solution)

6. Solve $\frac{1}{x+4} + \frac{x}{x+5} = \frac{1}{x^2+9x+20}$.
 $x = -1$ ($x = -4$ is an extraneous solution)

7. Solve $\frac{2}{x} + \frac{4}{x^2} = 2$.
 $x = 2$ and $x = -1$

8. Solve $\frac{7}{2x+2} = \frac{7}{x-3}$.
 $x = -5$

9. Solve $\frac{2}{(x+1)(x-2)} - 2 = \frac{2}{x-2}$.
 $x = \sqrt{2}$ and $x = -\sqrt{2}$

10. Solve $\frac{x}{x+3} = \frac{x}{x^2-9}$.
 $x = 0$ and $x = 4$