Solving Rational Equations

Fraction = Fraction

Solve each rational equation.

1. $\frac{12}{x}=\frac{30}{75}$	2. $\frac{x-5}{15}=\frac{4}{5}$	3. $\frac{3x+1}{x-1}=\frac{5}{7}$
4. $\frac{x-6}{3}=\frac{-2x-2}{15}$	5. $\frac{6}{3x-1}=\frac{3}{4}$	6. $\frac{5}{x}=\frac{7}{x-4}$
7. $\frac{12}{2-x}=\frac{15}{7+x}$	8. $\frac{2}{4x+3}=\frac{x}{2x^2+12}$	9. $\frac{9}{9x+4}=\frac{x}{x^2+6}$

Fraction = Fraction ± Fraction

Solve the rational equation.

10. $\frac{1}{x+1}+\frac{x+5}{x+1}=\frac{5x+5}{x+1}$	11. $\frac{5x+5}{x+4}-\frac{3x+2}{x+4}=\frac{4x+16}{x+4}$	12. $\frac{10x-8}{x^2-4}=\frac{4x+12}{x^2-4}+\frac{x}{x^2-4}$
13. $\frac{12}{6x}-\frac{5x-25}{6x}=\frac{x}{6x}$	14. $\frac{4x+8}{6x}=\frac{x-1}{6x}+\frac{6}{6x}$	15. $\frac{4x+4}{x^2-2x-3}=\frac{2x-6}{x^2-2x-3}+\frac{16}{x^2-2x-3}$