

## Rational Equations

1.  $3 = \frac{12}{4x+5}$

2.  $\frac{9}{4x+2} = \frac{1}{2}$

3.  $\frac{4}{9+x} = -\frac{1}{3x}$

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



7.  $\frac{2x}{6x^2 - 5} = \frac{1}{3x + 10}$



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

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



13.  $\frac{18}{x^2 - 9} + 1 = \frac{x}{x+3}$

15.  $\frac{10}{x-3} + \frac{5}{x+1} = \frac{25}{x^2 - 2x - 3}$



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



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

4.  $\frac{y-5}{9} = \frac{y-7}{5}$

6.  $\frac{9}{2x-3} = \frac{6}{3x-7}$



8.  $4 + \frac{x+2}{2} - \frac{x+4}{6} = 0$

10.  $\frac{8}{x} + \frac{x+6}{3x} + \frac{x-4}{6x} = \frac{8}{9}$



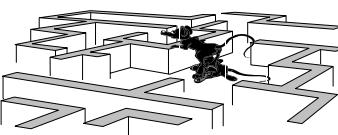
12.  $\frac{2}{x-1} - \frac{3}{x+4} + \frac{1}{x+5} = 0$

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



16.  $\frac{3}{x^2 + 2x - 15} + \frac{4}{x^2 - 9} = \frac{8}{x^2 + 8x + 15}$

18.  $\frac{2}{x^2 - 2x} - \frac{1}{3} = \frac{1}{x}$



20.  $\frac{1}{x^2 + 2x - 8} + \frac{3x}{2x^2 + 19x + 44} = \frac{2x}{2x^2 + 7x - 22}$