

1. $3x + \frac{1}{2}x + 6 = 2x$ $x = -4$
2. $\frac{3}{2}x + 8 = \frac{3}{5}x - 1$ $x = -10$
3. $\frac{4}{3}(x+1) = 2x - 1$ $x = \frac{7}{2}$
4. $\frac{x}{2} + \frac{2x}{3} - \frac{5x}{6} = 5x - 14$ $x = 3$
5. $\frac{x-2}{4} - \frac{2x+6}{3} = 0$ $x = -6$
6. $\frac{x+1}{5} + \frac{x-2}{6} = 1$ $x = \frac{34}{11}$
7. $\frac{2x+4}{4} - 2(x-3) = 5 - \frac{7x}{2}$ $x = -1$
8. $\frac{x-5}{3} - \frac{2x-4}{12} = \frac{5-x}{4} - \frac{x}{3}$ $x = \frac{31}{9}$
9. $\frac{1}{x} + 1 = \frac{3}{x} - 3$ $x = \frac{1}{2}$
10. $\frac{2x-1}{3} - \frac{5x-4}{7} = \frac{x+5}{2} - 5$ $x = 5$
11. $\frac{5x}{6} - \frac{3}{6} = \frac{2}{4} + \frac{x}{4}$ $x = \frac{12}{7}$
12. $\frac{x-4}{6} + \frac{2x-4}{8} = \frac{5x}{10} - \frac{5x-6}{12}$ $x = 5$
13. $\frac{x+2}{x} - \frac{1}{3} = \frac{4}{x}$ $x = 3$
14. $\frac{x+2}{3} - \frac{5x-3}{4} - 2x = 5$ $x = -\frac{43}{35}$
15. $\frac{5+2x}{x} - \frac{1}{x^2} = 2$ $x = \frac{1}{5}$
16. $x(x-1) - (x-3) = x^2 - 1 - (x-2)$ $x = 2$
17. $\frac{x-1}{4} - \frac{x-5}{36} = \frac{x-5}{9}$ $x = -4$
18. $5x - 3(2x-4) = 9$ $x = 3$
19. $\frac{3}{2} + 3x = \frac{5x}{9} - \frac{2x+1}{6}$ $x = \frac{-3}{5}$
20. $\frac{8x}{2} - 3 = 3x + 1$ $x = 4$
21. $\frac{3}{2} + \frac{3x}{2} - \frac{5x}{6} = 15$ $x = \frac{81}{4}$
22. $\frac{3x-11}{20} - \frac{5x-1}{14} = \frac{x-7}{10} - \frac{5x-6}{21}$ $x = \frac{-27}{29}$
23. $\frac{3x-17}{8} - \frac{1-4x}{3} = \frac{1-x}{4} - \frac{9+x}{6}$ $x = \frac{29}{51}$
24. $2 + \frac{3x-1}{15} + \frac{x-4}{5} = \frac{x+4}{3}$ $x = 1$
25. $\frac{5x+7}{2} - \frac{3x+9}{4} = \frac{2x+5}{3} + 5$ $x = 5$
26. $\frac{x-5}{2} - \frac{8-3x}{2} = 2 - \frac{9x}{2}$ $x = \frac{17}{13}$
27. $5 - \frac{2x-8}{2} = \frac{3x}{2} - \frac{3-x}{5}$ $x = \frac{32}{9}$
28. $\frac{x-2}{6} - \frac{3-2x}{5} = 6 - \frac{5x}{5}$ $x = \frac{208}{47}$
29. $\frac{x-5}{9} - \frac{4-2x}{2} = 8 - \frac{8x}{2}$ $x = \frac{95}{46}$
30. $\frac{-6\left(\frac{5+x}{3}\right)}{2} = \frac{1}{3}\left(4 - \frac{4x}{2}\right) + \frac{3x}{2}$ $x = -\frac{38}{11}$
31. $\frac{4\left(\frac{2+x}{5}\right)}{3} = \frac{1}{5}\left(8 - \frac{6x}{3}\right) + \frac{5x}{3}$ $x = \frac{-16}{15}$
32. $\frac{5\left(\frac{7+x}{3}\right)}{2} = \frac{1}{3}\left(5 - \frac{5x}{2}\right) + \frac{3x}{2}$ $x = -25$
33. $\frac{-1\left(1 - \frac{3x}{2}\right)}{2} + \frac{6x}{2} = \frac{-3\left(\frac{6+x}{2}\right)}{2}$ $x = -\frac{8}{9}$
34. $\frac{-1\left(4 - \frac{6x}{3}\right)}{2} + \frac{5x}{3} = \frac{-5\left(\frac{2+x}{2}\right)}{3}$ $x = \frac{2}{21}$
35. $\frac{-1\left(8 - \frac{4x}{2}\right)}{3} + \frac{2x}{2} = \frac{-6\left(\frac{7+x}{3}\right)}{2}$ $x = -\frac{13}{8}$
36. $18 + \frac{3x+4}{5} = \frac{5x+4}{2} - \frac{2x-5}{2}$ $x = \frac{143}{9}$
37. $\frac{x}{3} - \frac{13-2x}{2} = \frac{1}{6}$ $x = 5$
38. $\frac{15x-35}{10} + \frac{4-x}{3} = \frac{20}{4} + \frac{3x-3}{18}$ $x = 7$
39. $\frac{4x}{2} + x = \frac{6x}{3} + 7$ $x = 7$
40. $\frac{3x+1}{3} - \frac{5x-4}{7} = \frac{25}{21}$ $x = 1$