

Solve each of the following equations. Express the solution in simplest form. Show all of your work neatly organized.

1. $7x + 3 = 3x - 7$

2. $9x - 7 = 2x + 8$

3. $-10x - 5 = 3x - 7$

4. $\frac{2x}{3} + \frac{1}{6} = \frac{5x}{12} - \frac{3}{4}$

5. $\frac{7x}{8} - \frac{3}{10} = 1 - \frac{3x}{5}$

6. $\frac{5x}{9} - \frac{5}{6} = \frac{3x}{4} + \frac{1}{12}$

7. $5(2x + 3) + 7(x - 2) = 0$

8. $3(5x - 1) + 2(3x + 5) = 7$

9. $2(3x + 1) - 5(2x + 3) = x + 1$

10. $3(7x - 2) - 5(4x - 1) = 3(x - 1)$

11. $.02(3x + 1) + .05(2x - 1) = 10$

12. $.5(7x - 2) - .12(3x - 4) = 2x - 1$

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13.
$$\frac{3x+5}{6} + \frac{2x-1}{4} = \frac{x+7}{8} - \frac{2x-1}{12}$$

14.
$$1 - \frac{5x+3}{10} = x - \frac{7x-5}{4}$$

15.
$$\frac{3x+5}{8} - \frac{2x-5}{12} = \frac{5x-2}{6} - \frac{x+3}{12}$$

16.
$$\frac{2}{3}(5x+1) - \frac{1}{2}(2x-3) = 1$$

17.
$$-\frac{5}{9}(x-1) - \frac{1}{6}(x+1) = x+2$$

18.
$$\frac{5}{6}(10x-3) - \frac{2}{3}(4x-1) = 1 - \frac{7}{10}(2x+3)$$