

Algebra Review - Solving Linear Equations I

Solve:

1. $x - 3 = 10$

2. $x + 3 = 10$

3. $2x + 5 = 15$

4. $2x - 5 = 15$

5. $5 + 2x = -15$

6. $-2x - 5 = -15$

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

8. $4 - \frac{1}{3}x = -3$

9. $6x - 5 = 3x - 29$

10. $11 - 5x = 5 - 3x$

11. $x - 2x + 3x - 4 = 8$

12. $10x - 9 + 2x - 3 = 8x - 18$

13. $7x + 3(2x + 5) = 10x + 17$

14. $3x - (2x - 5) = -3$

15. $4(2x + 1) - 7(x - 1) = 2 - 6$

16. $-2a = 3a - 15$

17. $12 - 4x = -2(3 + 5x)$

18. $5x - (7x + 9) = 11$

19. $3(x - 8) = -4x - 5x$

$$20. -4(3 - 2x) + 8 = 6x - 2(4 + 3x)$$

$$21. 0.8(3x - 2) = x + 0.2(x - 5)$$

$$22. 4.2x + 7.0 = 1.8 - 2.4x$$

$$23. \frac{5}{4}x - \frac{2}{3} = \frac{1}{6}x + \frac{3}{8}$$

$$24. \frac{2}{3}(2x - 1) = 10$$

$$25. \frac{3}{4}(3x - \frac{1}{2}) - \frac{1}{3} = \frac{2}{3}$$

$$26. \frac{1}{2}x = \frac{3}{2}x - \frac{5}{2}(x + 4)$$

Answers:

$$1. x = 13$$

$$2. x = 7$$

$$3. x = 5$$

$$4. x = 10$$

$$5. x = -10$$

$$6. x = 5$$

$$7. x = 21$$

$$8. x = 21$$

$$9. x = -8$$

$$10. x = 3$$

$$11. x = 6$$

$$12. x = -\frac{3}{2}$$

$$13. x = \frac{2}{3}$$

$$14. x = -8$$

$$15. x = -15$$

$$16. a = 3$$

$$17. x = -3$$

$$18. x = -10$$

$$19. x = 2$$

$$20. x = -\frac{1}{2}$$

$$21. x = \frac{1}{2}$$

$$22. x = -\frac{1}{6}$$

$$23. x = \frac{25}{26}$$

$$24. x = 8$$

$$25. x = \frac{11}{18}$$

$$26. x = -\frac{20}{3} \text{ or } x = -6\frac{2}{3}$$