

Linear Equations Worksheet

Name: _____ Class: _____ Date: _____

A. Solve for x

1. $x + 5 = 12$ $x =$ _____

2. $x + 8 = 20$ $x =$ _____

3. $x - 4 = 10$ $x =$ _____

4. $x - 7 = 15$ $x =$ _____

5. $2x = 18$ $x =$ _____

6. $3x = 24$ $x =$ _____

7. $4x = 36$ $x =$ _____

8. $5x = 45$ $x =$ _____

9. $x/2 = 7$ $x =$ _____

10. $x/3 = 9$ $x =$ _____

B. One-Step Linear Equations

11. $x + 14 = 25$ $x =$ _____

12. $x - 12 = 18$ $x =$ _____

13. $x + 21 = 40$ $x =$ _____

14. $x - 15 = 22$ $x =$ _____

15. $6x = 54$ $x =$ _____

16. $7x = 63$ $x =$ _____

17. $8x = 72$ $x =$ _____

18. $9x = 81$ $x =$ _____

19. $x/4 = 6$ $x =$ _____

20. $x/5 = 8$ $x =$ _____

C. Two-Step Equations

21. $2x + 5 = 17$ $x =$ _____

22. $3x + 4 = 19$ $x =$ _____

23. $4x + 3 = 27$ $x =$ _____

24. $5x + 2 = 32$ $x =$ _____

25. $2x - 3 = 15$ $x =$ _____

26. $3x - 5 = 16$ $x =$ _____

27. $4x - 7 = 21$ $x =$ _____

28. $5x - 4 = 31$ $x =$ _____

29. $6x + 2 = 38$ $x =$ _____

30. $7x - 6 = 43$ $x =$ _____

D. Equations with Brackets

31. $2(x + 3) = 16$ $x =$ _____

32. $3(x + 2) = 21$ $x =$ _____

33. $4(x - 1) = 20$ $x =$ _____

$$34. 5(x - 2) = 30 \quad x = \underline{\hspace{2cm}}$$

$$35. 2(x + 5) = 24 \quad x = \underline{\hspace{2cm}}$$

$$36. 3(x - 4) = 15 \quad x = \underline{\hspace{2cm}}$$

$$37. 4(x + 2) = 32 \quad x = \underline{\hspace{2cm}}$$

$$38. 5(x - 3) = 35 \quad x = \underline{\hspace{2cm}}$$

E. Equations with Variables on Both Sides

$$39. 2x + 5 = x + 12 \quad x = \underline{\hspace{2cm}}$$

$$40. 3x + 4 = x + 14 \quad x = \underline{\hspace{2cm}}$$

$$41. 4x - 3 = 2x + 9 \quad x = \underline{\hspace{2cm}}$$

$$42. 5x + 2 = 3x + 16 \quad x = \underline{\hspace{2cm}}$$

$$43. 6x - 4 = 2x + 20 \quad x = \underline{\hspace{2cm}}$$

$$44. 7x + 3 = 4x + 18 \quad x = \underline{\hspace{2cm}}$$

$$45. 8x - 6 = 5x + 12 \quad x = \underline{\hspace{2cm}}$$

$$46. 9x + 1 = 6x + 19 \quad x = \underline{\hspace{2cm}}$$

F. Multiple Choice

$$47. \text{Solve: } x + 9 = 15 \quad \text{a) 4} \quad \text{b) 5} \quad \text{c) 6} \quad \text{d) 7}$$

$$48. \text{Solve: } 3x = 27 \quad \text{a) 7} \quad \text{b) 8} \quad \text{c) 9} \quad \text{d) 10}$$

$$49. \text{Solve: } 2x + 6 = 20 \quad \text{a) 6} \quad \text{b) 7} \quad \text{c) 8} \quad \text{d) 9}$$

$$50. \text{Solve: } 4x - 8 = 24 \quad \text{a) 6} \quad \text{b) 7} \quad \text{c) 8} \quad \text{d) 9}$$

$$51. \text{Solve: } 5(x + 2) = 35 \quad \text{a) 5} \quad \text{b) 6} \quad \text{c) 7} \quad \text{d) 8}$$

$$52. \text{Solve: } 3x + 5 = x + 15 \quad \text{a) 4} \quad \text{b) 5} \quad \text{c) 6} \quad \text{d) 7}$$

G. Word Problems

53. A number increased by 8 is 20. Find the number.
54. Five times a number is 45. Find the number.
55. A number decreased by 12 is 18. Find the number.
56. Three times a number plus 4 equals 25. Find the number.
57. Twice a number minus 5 equals 17. Find the number.
58. A number divided by 4 equals 9. Find the number.
59. The sum of a number and 15 is 32. Find the number.
60. Seven times a number minus 3 equals 39. Find the number.

Total Questions: 60