

**Lesson #2: Solving One and Two Variable Linear Equations**  
**(Reference: Lesson #7 & #8 in book)****Problem**

1. Solve each of the following equations for the indicated variable. (Show all of your work.)

1.  $x - 9 = -12$

2.  $7x = 28$

3.  $3x + 7 = 22$

4.  $-8x + 3x + 7 = 47$

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

6.  $4(x + 3) - 2x = 7$

7.  $5(x + 2) - 4(x - 1) = 6$

8.  $5(3 - 2x) - 3(4 - 2x) = 19$

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

10.  $7x + 12 - 4x = 2(x - 3) + 4$

11.  $2x + 4(4x - 3) = 4(6x + 4) - 4$

12.  $3(5 - 3x) - 2(5 + 2x) = 3(x + 1) - 6x - 23$

13.  $-3(x - 1) + 8(x - 3) = 6x + 7 - 5x$

14. Solve  $x + y = 9$  for  $y$ .

15. Solve  $x - 2y = 18$  for  $x$ .

16. Solve  $-2x = 8y$  for  $x$ .

17. Solve  $-3y = 9x - 12$  for  $y$ .

18. Solve  $3x - 6y = -18$  for  $x$ .

19. Solve  $-4x - 8y = 16$  for  $y$ .

20. Solve  $-6x - 12y = 30$  for  $x$ .

21. Solve  $-4x + 3y - 6 + 7x - 11y + 14 = 32$  for  $y$ .

22. Solve  $3(x + 5) + 4(2y + 3) = 45$  for  $x$ .

23. Solve  $4x - 3y - 2x + 6 = 6x - 3y + 16 - 2y$  for  $y$ .

24. Solve  $3(x + y) + 3 = -2x + y - 10$  for  $x$ .

25. Solve  $4(x + 2) + 3y = 3(y - 2) + 2x$  for  $x$ .