

Solving Linear Equations

Assignment 1.3

Name _____

Date _____

Solve each equation. Show your work.

1. $x - 9 = 12$

2. $3x - 2 = 16$

3. $3 - x = 2$

4. $-4 = x - 1$

5. $3 = 2 + x$

6. $-14 + 2x = 6$

7. $6x = 24$

8. $-4x = -14$

9. $\frac{3}{2}x + 1 = 13$

10. $\frac{2}{5}x + 10 = 0$

11. $\frac{4}{3}x + 2 = 6$

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

$$13. x + \frac{3}{2} = \frac{3}{4}(x - \frac{1}{2})$$

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

$$15. x + \frac{3}{5} = \frac{7}{5}(x + 1)$$

$$16. \frac{1}{2}(14x + 2) = 3(2 - 3x)$$

$$17. 5x = \frac{4}{5}(5x - 2)$$

$$18. x + 6 = 3(3 - x)$$

19. A movie ticket costs \$6.50. You have \$35.00 to buy tickets and popcorn for four people. How much money is left to buy popcorn after the tickets are paid for?

20. You need to earn \$475 per week to afford the new car you want to purchase. Your work week is 45 hours. You get 1.5 times the regular hourly rate for overtime (anything over 40 hours). How much does your hourly rate need to be?