Solving Multi-Step Equations

Solve each equation.

1. $19 - h - h = -13$ _____

2. $25 = 7 + 3k - 12$ _____

3. $5n - 16 - 8n = -10$ _____

4. $x - 1 + 5x = 23$ _____

5. $42j + 18 - 19j = -28$ _____

6. $-28 + 15 - 22z = 31$ _____

7. $6(3m + 5) = 66$ _____

8. $-5(x - 3) = -25$ _____

9. $42 = 3(2 - 3h)$ _____

10. $3p - 4 = 31$ _____

11. $-3 = -3(2t - 1)$ _____

12. $-15 = 5(3q - 10) - 5q$ _____

13. $\frac{a}{7} + \frac{5}{7} = \frac{2}{7}$ _____

14. $\frac{j}{6} - 9 = \frac{5}{6}$ _____

15. $\frac{x}{3} - \frac{1}{2} = \frac{3}{4}$ _____

16. $\frac{b}{9} - \frac{1}{2} = \frac{5}{18}$ _____

17. $0.52y + 2.5 = 5.1$ _____

18. $2.45 - 3.1t = 21.05$ _____

19. $-4.2 = 9.1x + 23.1$ _____

20. $14.2 = -6.8 + 4.2d$ _____

21. $x - 2(x + 10) = 12$ _____

22. $-10 = 5(2w - 4)$ _____

23. Show two different ways to solve $-10 = \frac{1}{4}(8y - 12)$ (2 points)

Write an equation to model each situation. Solve each equation.

24.   General admission tickets to the fair cost $3.50 per person. Ride passes cost an additional $5.50 per person. Parking cost $6.00 for the family. The total cost for ride passes and parking was $51.00. How many people in the family attended the fair?

25.   Janis and Robert are shopping for new guitar string at the mall. Janis buys 3 packs of strings. Robert buys 2 packs of strings and a set of picks. The set of picks cost $15. The total cost is $ 40. What is the cost of one pack of string?

26.   Jim and Roberta are shopping for games at the mall. Jim buys 3 games. Roberta buys 4 games and a set of directions on playing the game better. The set of rules cost $12. The total cost is $ 112. What is the average cost of each game?

27.   George has a part-time job. He works for 5 hours on Friday and 7 hours on Saturday. He also receives his $50 per week allowance. He earns $146 per week. How much did he earn per hour at the part-time job?

28.   Angela ate at the same restaurant four times. Each time she ordered a salad and left a $5 tip. She spent a total of $54. What was the cost of each salad?