

10-2 Practice

Solving Two-Step Equations

Solve each equation. Check your solution.

1. $3g + 5 = 17$

2. $9 = 4a + 13$

3. $13 = 5m - 2$

4. $-15 = 2t - 11$

5. $7k - 5 = -19$

6. $13 = 4x - 11$

7. $10 = \frac{z}{2} + 7$

8. $6 + \frac{n}{5} = -4$

9. $4 - 3y = 31$

10. $15 - 2b = -9$

11. $-\frac{1}{3}y - 6 = -11$

12. $16 - \frac{r}{7} = 21$

13. $30 = 5d - 8d$

14. $w + 3w = 20$

15. $5 - 7m + 9m = 11$

16. $-18 = 8x - 9 - 5x$

17. $25 = s + 13 - 4s$

18. $6a + 7 - a = -18$

19. $3(y + 5) = 21$

20. $7(p - 3) = 35$

21. $-48 = 6(v + 2)$

22. $\frac{k - 3}{4} = 10$

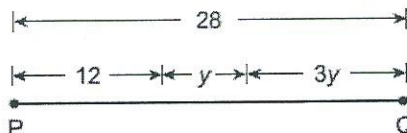
23. $\frac{z + 5}{7} = -3$

24. $\frac{9 + t}{12} = -3$

25. **SHOPPING** Mrs. Williams shops at a store that has an annual membership fee of \$30. Today she paid her annual membership and bought several fruit baskets costing \$15 each as gifts for her coworkers. Her total was \$105. Solve the equation $15b + 30 = 105$ to find the number of fruit baskets Mrs. Williams purchased.

26. **GAMES** A card game has 50 cards. After dealing 7 cards to each player, Tupi has 15 cards left over. Solve the equation $50 - 7p = 15$ to find the number of players.

27. **GEOMETRY** Write an equation to represent the length of \overline{PQ} . Then find the value of y .



10-2**Word Problem Practice*****Solving Two-Step Equations***

<p>1. SHOPPING Jenna bought 5 reams of paper at the store for a total of \$21. The tax on her purchase was \$1. Solve $5x + 1 = 21$ to find the price for each ream of paper.</p>	<p>2. CARS It took Lisa 85 minutes to wash three cars. She spent x minutes on each car and 10 minutes putting everything away. Solve $3x + 10 = 85$ to find how long it took to wash each car.</p>
<p>3. EXERCISE Rick jogged the same distance on Tuesday and Friday, and 8 miles on Sunday, for a total of 20 miles for the week. Solve $2x + 8 = 20$ to find the distance Rick jogged on Tuesday and Friday.</p>	<p>4. MOVING Heather has a collection of 26 mugs. When packing to move, she put the same number of mugs in each of the first 4 boxes and 2 mugs in the last box. Solve $4x + 2 = 26$ to find the number of mugs in each of the first four boxes.</p>
<p>5. TELEVISION Burt's parents allow him to watch a total of 10 hours of television per week. This week Burt is planning to watch several two-hour movies and four hours of sports. Solve $2x + 4 = 10$ to find the number of movies Burt is planning to watch this week.</p>	<p>6. TRAVEL Lawrence drives the same distance Monday through Friday commuting to work. Last week Lawrence drove 25 miles on the weekend, for a total of 60 miles for the week. Solve $5x + 25 = 60$ to find the distance Lawrence drives each day commuting to work.</p>
<p>7. MONEY McKenna had \$32 when she got to the carnival. After riding 6 rides, she had \$20 left. Solve $32 - 6x = 20$ to find the price for each ride.</p>	<p>8. GARDENING Jack has 15 rosebushes. He has the same number of yellow, red, and pink bushes, and 3 multicolored bushes. Solve $3x + 3 = 15$ to find the number of yellow rosebushes Jack has.</p>