

Practice 2-4**Solving Equations by Multiplying or Dividing**

Use a calculator, paper and pencil, or mental math. Solve each equation.

1. $9n = 126$

2. $\frac{d}{3} = -81$

3. $-2t = 56$

4. $\frac{k}{-3} = 6$

5. $-18 = \frac{y}{-2}$

6. $\frac{y}{16} = 3$

7. $-56 = 8r$

8. $9w = -63$

9. $-3v = -48$

10. $13 = \frac{x}{-4}$

11. $28 = -4a$

12. $\frac{t}{-42} = 3$

13. $-19 = \frac{f}{6}$

14. $75 = -5s$

15. $\frac{g}{4} = 56$

16. $18w = -36$

17. $24 = \frac{f}{-4}$

18. $15 = -3j$

19. $102k = 408$

20. $\frac{b}{-96} = -3$

Solve and check each equation.

21. $\frac{x}{19} = -21$

22. $\frac{x}{-22} = -63$

23. $-41x = 164$

24. $-100r = 1,200$

25. $\frac{x}{91} = -98$

26. $452 = -4x$

27. $50x = -2,500$

28. $79x = -6,320$

Write and solve an equation to represent each situation.

29. One of the largest flowers, the Rafflesia, weighs about 15 lb. How many Rafflesia flowers can be placed in a container that can hold a maximum of 240 lb?

30. "Heavy water" is a name given to a compound used in some nuclear reactors. Heavy water costs about \$1,500 per gallon. If a nuclear plant spent \$10,500 on heavy water, how many gallons of heavy water were bought?

Practice 2-6

Solving Two-Step Equations

Solve each equation. Then check your answer.

- | | | | |
|--------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|
| 1. $7m + 8 = 71$
_____ | 2. $\frac{y}{7} + 6 = 11$
_____ | 3. $12y + 2 = 146$
_____ | 4. $\frac{m}{9} - 17 = 21$
_____ |
| 5. $\frac{y}{-12} + 1 = 6$
_____ | 6. $2a - 1 = 19$
_____ | 7. $\frac{c}{9} - 8 = 17$
_____ | 8. $-4t + 16 = 24$
_____ |
| 9. $4f + 11 = -29$
_____ | 10. $\frac{g}{17} - 8 = -6$
_____ | 11. $13n - 9 = 17$
_____ | 12. $5v - 42 = 73$
_____ |
| 13. $\frac{b}{-2} - 8 = -6$
_____ | 14. $3d + 14 = 11$
_____ | 15. $\frac{z}{17} - 1 = 8$
_____ | 16. $\frac{e}{5} - 14 = 21$
_____ |
| 17. $\frac{f}{-9} + 4 = 2$
_____ | 18. $-2y + 16 = 10$
_____ | 19. $4w - 26 = 82$
_____ | 20. $\frac{j}{19} - 2 = -5$
_____ |

Solve each equation.

- | | |
|---------------------------|-------------------------------------|
| 21. $3n - 8 = 4$
_____ | 22. $\frac{n}{5} - 4 = 11$
_____ |
| 23. $2n - 3 = 9$
_____ | 24. $1 + \frac{n}{4} = 9$
_____ |

Match each sentence with a two-step equation.

- | | |
|---|---------------------------|
| 25. Half a dollar minus five dollars equals fifteen dollars.
_____ | A. $4n - 8 = -5$ |
| 26. Five hours more than one half of an hour equals fifteen hours.
_____ | B. $3n - 2 = 12$ |
| 27. Two less than three times the number of feet of fencing required equals twelve feet.
_____ | C. $\frac{n}{2} + 5 = 15$ |
| 28. Eight less than the quotient of Dave's golf score and four equals negative five.
_____ | D. $3n + 2 = 12$ |
| 29. Three times Gail's age increased by two years equals twelve years.
_____ | E. $\frac{n}{2} - 5 = 15$ |
| 30. Eight fewer than four times the elevation of a city equals negative five.
_____ | F. $\frac{n}{4} - 8 = -5$ |