

Evaluate the expression. (p. 8)

1. $3 \cdot 4^2 - 21$

2. $4 + 4^2 \div 8$

3. $77 \div (11 - 4)$

4. $\frac{1}{2}(8 \cdot 6) - 4^2$

5. $3[50 - (13 - 7)^2]$

6. $\frac{3}{4}[(6 + 4)^2 - 40]$

Check whether the given number is a solution of the equation or inequality. (p. 21)

7. $7t - 11 = 52; 9$

8. $3b - 2 = 2b + 3; 4$

9. $8z - 11 > 21; 4$

10. $5a + 3 \leq 13; 2$

11. $5 - y \geq 5; 3$

12. $8x - 15 < 8; 7$

Find the sum or difference.

13. $-2\frac{1}{6} + (-4\frac{2}{3})$ (p. 74)

14. $2.5 - (-2.05)$ (p. 80)

15. $-24.6 - (-5.5)$ (p. 80)

Find the product or quotient.

16. $\frac{5}{2}(-8)(-5)$ (p. 88)

17. $9 \div (-\frac{3}{7})$ (p. 103)

18. $-\frac{7}{8} \div \frac{1}{2}$ (p. 103)

Evaluate the expression for the given value of the variable(s).

19. $\frac{32}{w} - 2$ when $w = 4$ (p. 8)

20. $7 + 3m^2 - 8m$ when $m = 5$ (p. 8)

21. $\frac{5y}{32 - y^3}$ when $y = 3$ (p. 8)

22. $5.15 + (-h) + 6.6$ when $h = 4.3$ (p. 74)

23. $17.4 - |-p|$ when $p = 3.5$ (p. 80)

24. $k^2 - 12.2k$ when $k = -1.6$ (p. 88)

25. $8.3x - (-y)$ when $x = 6$ and $y = 9$ (p. 88)

26. $\frac{y}{5x - y}$ when $x = 2$ and $y = 4$ (p. 103)

Solve the equation. Check your solution.

27. $m + 16 = 5$ (p. 134)

28. $-4 = \frac{w}{7}$ (p. 134)

29. $5 + 3x = 23$ (p. 141)

30. $\frac{a}{3} - 4 = 29$ (p. 141)

31. $-4 = -2b - 18 + 5b$ (p. 148)

32. $\frac{3}{8}(16n + 48) = 72$ (p. 148)

33. $-8z + 18 = 2(2z - 9)$ (p. 154)

34. $(15c + 30) = \frac{1}{3}(102 - 12c)$ (p. 154)

Solve the proportion. (p. 168)

35. $\frac{6}{d} = \frac{12}{17}$

36. $\frac{4}{7} = \frac{20}{m}$

37. $\frac{1}{9} = \frac{5}{3x}$

38. $\frac{3}{6h} = \frac{12}{72}$

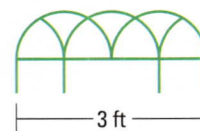
39. $\frac{2}{11} = \frac{4}{t - 1}$

40. $\frac{12}{a + 1} = \frac{132}{35}$

41. $\frac{w + 2}{8} = \frac{w}{3}$

42. $\frac{4}{9} = \frac{z}{z + 10}$

43. **GARDENS** You want to put edging around a rectangular flower garden that is 15 feet long and 12 feet wide. The edging comes in 3 foot pieces, as shown. How many pieces of edging do you need to buy? (p. 28)



44. **MUSIC** The table shows the amount of time m (in hours per person per year) that adults listened to recorded music as a function of the time t (in years) since 1996. Graph the function. (p. 43)

Years since 1996, t	0	1	2	3	4	5
Hours listening to music, m	292	270	283	289	263	250

45. **STOCKS** The daily change in the price of a share of stock is the difference of the price of a share when trading closes and the price of a share when trading opened earlier that day. The table shows the prices of a share of stock during a 5 day period. Find the change in price for each day. (p. 80)

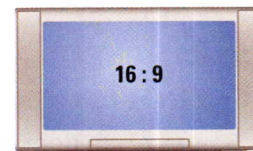
Day	1	2	3	4	5
Opening price (dollars)	39.16	38.82	38.37	38.12	39.14
Closing price (dollars)	38.82	38.37	38.12	39.14	39.22

46. **CRAFTS** You want to make a square mirror by applying silver leaf to a piece of glass. You have enough silver leaf to cover 854 square inches. Determine the side length of the square piece of glass you need to have cut for this project. Round your answer to the nearest inch. (p. 110)
47. **BANQUETS** The senior class at your high school has its prom at a banquet facility. The banquet facility charges \$15.95 per person for a dinner buffet and \$400 to rent the banquet hall for an evening. The class paid the banquet facility a total of \$2633 for the dinner buffet and use of the banquet hall. How many people attended the prom? (p. 141)

48. **TELEVISIONS** The ratio of the length to the width of two different television screens is shown. The width of each screen is 16.2 inches. Find the length of each screen. (p. 162)



Standard



Wide screen

49. **BASKETBALL** The circle graph shows the positions of the 20 players on a basketball team. (p. 176)

- How many players on the team play center?
- How many players on the team play guard?
- How many players on the team play forward?

