

Solve the equation. Check your solution.

1. $5 + r = -19$

2. $z - 8 = -12$

3. $-11x = -77$

4. $\frac{a}{9} = 6$

5. $15q - 17 = 13$

6. $3y + 2 = 26$

7. $\frac{b}{4} + 5 = 14$

8. $\frac{m}{10} - 6 = 20$

9. $6j + 5j = 33$

10. $4k - 9k = 10$

11. $14c - 8c + 7 = 37$

12. $4w - 21 + 5w = 51$

13. $-19.4 - 15d + 22d = 4.4$

14. $-12h + 39 = -4h - 17$

15. $-5.7v - 44.2 = -8.3v$

16. $-6.5t + 15 = -9.7t + 43.8$

17. $3(3n + 4) = 54 + 6n$

18. $\frac{1}{3}(24p - 66) = 3p + 43$

Solve the proportion. Check your solution.

19. $\frac{3}{4} = \frac{z}{16}$

20. $\frac{72}{45} = \frac{8}{w}$

21. $\frac{k}{9} = \frac{63}{81}$

22. $\frac{-5n}{4} = \frac{15}{2}$

23. $\frac{34}{6} = \frac{2x + 1}{3}$

24. $\frac{-4a - 1}{-10a} = \frac{3}{8}$

Use the percent equation to answer the question.

25. What percent of 84 is 21?

26. What percent of 124 is 93?

27. What number is 15% of 64?

28. What number is 44% of 24.5?

29. 90 is what percent of 250?

30. 79.8 is what percent of 95?

Write the equation so that y is a function of x .

31. $8x + y = 14$

32. $-9x + 3y = 18$

33. $4x = -2y + 26$

34. **MOVIES** The ticket prices at a movie theater are shown in the table. A family purchases tickets for 2 adults and 3 children, and the family purchases 3 boxes of popcorn of the same size. The family spent a total of \$40.25. How much did each box of popcorn cost?

Ticket	Price
Adults	\$8.50
Children	\$5.50

35. **ICE SKATING** To become a member of an ice skating rink, you have to pay a \$30 membership fee. The cost of admission to the rink is \$5 for members and \$7 for nonmembers. After how many visits to the rink is the total cost for members, including the membership fee, the same as the total cost for nonmembers?

36. **SCALE DRAWING** You are making a scale drawing of your classroom using the scale 1 inch : 3 feet. The floor of your classroom is a rectangle with a length of 21 feet and a width of 18 feet. What should the length and width of the floor in your drawing be?

37. **SURVEYS** A survey asks high school seniors whether they would be willing to pay \$5 for their yearbook. Out of the 225 seniors surveyed, 198 said "yes." What percent of the seniors said "yes"?