

8-1 Practice***Solving Equations with Variables on Each Side***

Solve each equation. Check your solution.

1. $3g - 12 = 9g$

2. $14m = 18 + 12m$

3. $7c - 7 = 4c + 17$

4. $-11t = 15 - 6t$

5. $20s + 4 = 13s - 10$

6. $-2h - 16 = 3h - 6$

7. $27j - 6 = 14j + 7$

8. $-1 + 19w = 11w + 23$

9. $8 - p = -12 - 3p$

10. $9k - 26 = 6k - 8$

11. $28 - 4d = 5d - 17$

12. $2y + 7 = y$

13. $11.7 - 2x = x$

14. $3b + 4.4 = 2.6 - 6b$

15. $\frac{3}{4}y - 6 = \frac{1}{4}y + 10$

16. $2c + 7.5 = 6.2 - 3c$

17. $5d - 11 = 2d + 2$

18. $6a - 10 = 2a - 7$

19. $8n - 6 = -9n + 11$

20. $2f - 9 = 14f + 1$

Define a variable and write an equation to find each number. Then solve.

21. Twice a number is 60 more than five times the number. What is the number?

22. Four times a number is 21 more than the number. What is the number?

23. Eight less than three times a number equals the number. What is the number?

24. A number equals six less than four times a number. What is the number?

25. **TENNIS** The area of a tennis court is 2808 ft^2 , or 8 square feet more than 3.5 times the size of the area of a racquetball court. What is the area of a racquetball court?

26. **CELLULAR PHONES** One cellular phone carrier charges \$26.50 a month plus \$0.15 a minute for local calls. Another carrier charges \$14.50 a month and \$0.25 a minute for local calls. For how many minutes is the cost of the plans the same?