

LESSON  
2.8**Practice A**

For use with the lesson "Rewrite Equations and Formulas"

**Determine whether the equation is in function form.**

1.  $2x + y = 8$

2.  $x = 3y - 4$

3.  $y = 1 - 8x$

**Write the equation in function form.**

4.  $y + 10x = 3$

5.  $y - 13 = 4x$

6.  $8x + y - 4 = 0$

7.  $4x + 2y = 14$

8.  $3y - 9x = 27$

9.  $16 + 2y = 18x$

10.  $15x - 5y = 20$

11.  $2x - 3y = 6$

12.  $24 - 4y = 8x$

13.  $5x + 2y = 16$

14.  $-7x - 3y = 18$

15.  $4y - 4x + 4 = 0$

**Solve the literal equation.**

16. Solve  $P = R - C$  for  $C$ .

17. Solve  $F = ma$  for  $m$ .

18. Solve  $I = \frac{E}{R}$  for  $R$ .

19. Solve  $ax - by = c$  for  $x$ .

**Solve the formula for the indicated variable.**

20. Circumference of a circle:  $C = 2\pi r$ . Solve for  $r$ .

21. Volume of a pyramid:  $V = \frac{Bh}{3}$ . Solve for  $B$ .

22. Perimeter of a rectangle:  $P = 2\ell + 2w$ . Solve for  $w$ .

23. **Pencil Holder** You are decorating a clean soup can to make a pencil holder. You are going to glue yarn around the top and bottom of the can. The total amount  $y$  of yarn (in inches) you need is given by the equation  $y = 4\pi r$ , where  $r$  is the radius of the can.

- Solve the equation for  $r$ .
- What is the radius of the can if you need 37.68 inches of yarn?  
Use 3.14 for  $\pi$ .



24. **Investment** An advertisement for a bank states that you can earn \$50 interest in one year by investing in a savings account that earns 4% interest. Use the simple interest formula  $I = Prt$ , where  $I$  is the interest on an investment of  $P$  dollars at an interest rate  $r$  for  $t$  years.
- Which variable should you solve for to find the amount of money you need to invest to earn the \$50 in interest?
  - Solve the simple interest equation for the variable you identified in part (a).
  - How much money do you need to invest?