

LESSON
3.8**Practice A**

For use with pages 184–189

LESSON 3.8

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.

a. Solve the equation for r .

b. What is the radius of the can if you need 37.68 inches of yarn?
Use 3.14 for π .



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.

a. Which variable should you solve for to find the amount of money you need to invest to earn the \$50 in interest?

b. Solve the simple interest equation for the variable you identified in part (a).

c. How much money do you need to invest?