Name_____ Date_____

1.5 Practice A

In Exercises 1–6, solve the literal equation for _y_.

1. $4x + y = 7$

2. $y - 5x = 9$

3. $3y - 15x = 12$

4. $8x + 2y = 18$

5. $7x - y = 35$

6. $4x + 1 = 9 + 4y$

In Exercises 7–12, solve the literal equation for _x_.

7. $y = 5x - 2x$

8. $r = x + 9x$

9. $b = 3x + 9xy$

10. $w = 2hx - 11x$

11. $p = 4x + qx - 5$

12. $m = 9 + 3x - dx$

13. The total cost C (in dollars) to participate in a triathlon series is given by the literal equation $C = 90x + 35,$ where x is the number of triathlons in which you participate.

  a. Solve the equation for x.

  b. In how many triathlons do you participate if you spend a total of $305? $665?

  c. If your maximum annual triathlon cost is $1000, what is the maximum number of triathlons in which you could participate?

In Exercises 14–16, solve the formula for the indicated variable.

14. Force: $f = ma$; Solve for m.

15. Volume of a cylinder: $V = \pi r^2 h$; Solve for h.

16. Perimeter of a triangle: $P = a + b + c$; Solve for b.

17. You deposit $1500 in an account that earns simple interest at an annual rate of 3%.

  a. How long must you leave the money in the account to earn $900 in interest?

  b. The total amount (principle plus interest) in an account earning simple interest after t years is given by the formula $A = p + prt.$ How much is in the account after 5 years?

  c. Solve the equation in part (b) for p.