

## Extra Practice 5

### Lesson 6.5: Solving Equations Involving the Distributive Property

- Solve each equation using the distributive property. Verify the solution.
  - $5(a + 2) = -5$
  - $4(p - 6) = -4$
  - $10(y + 3) = 10$
  - $7(r - 6) = 7$
- Solve each equation. Verify the solution.
  - $-7(b + 6) = -84$
  - $-5(q - 11) = 70$
  - $-9(d - 3) = -45$
  - $-6(f - 5) = 36$
- At the fair, 5 friends each bought an \$8 meal voucher and one ice-cream voucher. The total cost of the vouchers was \$55. What was the price of an ice-cream voucher?
  - Choose a variable to represent the price of an ice-cream voucher. Write an equation to model this problem.
  - Solve the equation using the distributive property.
  - Verify the solution. Explain your thinking in words.
- Scott bought 54 m of fencing to enclose a rectangular plot of land. The width of the rectangular plot is 12 m. Assume Scott uses all the fencing. What is the length of the rectangular plot of land?
  - Choose a variable to represent the length of the rectangular plot of land. Write an equation to model this problem.
  - Solve the equation using the distributive property.
  - Verify the solution. Explain your thinking in words.
- Heather chose an integer. She added 9, then multiplied the sum by  $-4$ . The product was  $-16$ . Which integer did Heather choose?
  - Write an equation you can use to solve the problem.
  - Solve the equation.
  - Verify the solution.
- Solve each equation. Verify the solution.
  - $-7(a + 3) = -14$
  - $-5(7 - r + 11) = 10$
  - $-7(b - 3) = -13$
  - $-6(-3 + t - 5) = 10$