## Standardized Test Prep

Solving Equations With Variables on Both Sides

## **Multiple Choice**

For Exercises 1-5, choose the correct letter.

**1.** What is the solution of -8x - 5 + 3x = 7 + 4x - 9?

**A.** -3

**B.**  $-\frac{1}{3}$ 

**D.** 3

**2.** What is the solution of -(-5 - 6x) = 4(5x + 3)?

**F.** -2

**G.**  $-\frac{1}{2}$ 

I. 2

**3.** What is the solution of 2n - 3(4n + 5) = -6(n - 3) - 1?

**A.** -8

**B.** -6

C.  $-\frac{1}{2}$ 

**D.** 4

4. Negative one times the sum of twice a number and 3 is equal to two times the difference of -4 times the number and 3. What is the number?

**F.** −4

**G**. -2

H.  $-\frac{1}{2}$ 

I. 2

5. Jacob is saving for a new bicycle which costs \$175. He has already saved \$35. His goal is to have enough money saved in six weeks to pay for the bicycle. Which equation represents how much money he needs to save each week to meet his goal?

**A.** 35 + 6d = 175

**B.** 35 + 12d = 175

**C.** 6(35 + 2d) = 175

**D.** 2(35 + 6d) = 175

## **Short Response**

**6.** Admission for a water park is \$17.50 per day. A season pass costs \$125. A locker rental costs \$3.50 per day.

- a. What is an equation that represents the relationship between the cost of a daily pass and the cost of a season pass?
- b. How many days would you have to go to the water park for the season pass to save you money?