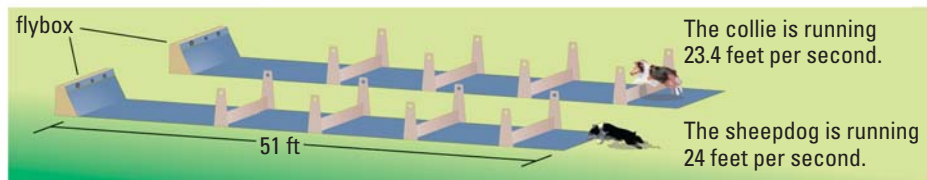


52. **MULTIPLE REPRESENTATIONS** For \$360, a rock-climbing gym offers a yearly membership where members can climb as many days as they want and pay \$4 per day for equipment rental. Nonmembers pay \$10 per day to use the gym and \$6 per day for equipment rental.
- Writing an Equation** Write an equation to find the number of visits after which the total cost for a member and the total cost for a nonmember are the same. Then solve the equation.
 - Making a Table** Make a table for the costs of members and nonmembers after 5, 10, 15, 20, 25, 30, and 35 visits. Use the table to check your answer to part (a).
53. **TAKS REASONING** Flyball is a relay race for dogs. In each of the four legs of the relay, a dog jumps over hurdles, retrieves a ball from a flybox, and runs back over the hurdles. The last leg of a relay is shown below. The collie starts the course 0.3 second before the sheepdog.



- Let t represent the time (in seconds) it takes the collie to run the last leg. Write and solve an equation to find the number of seconds after which the sheepdog would catch up with the collie.
- How long does it take the collie to run the last leg?
- Use your answers from parts (a) and (b) to determine whether the sheepdog catches up and passes the collie during the last leg of the relay. *Explain* your reasoning.

CHALLENGE Find the length and the width of the rectangle described.

- The length is 12 units more than the width. The perimeter is 7 times the width.
- The length is 4 units less than 3 times the width. The perimeter is 22 units more than twice the width.



MIXED REVIEW FOR TAKS

TAKS PRACTICE at classzone.com

REVIEW

Lesson 3.2;
TAKS Workbook

56. **TAKS PRACTICE** If $(x, 12)$ is a solution to the equation $3x + 2y = 18$, what is the value of x ? **TAKS Obj. 4**

(A) -6 (B) -3 (C) -2 (D) 3

REVIEW

TAKS Preparation
p. 420;
TAKS Workbook

57. **TAKS PRACTICE** A rectangular bulletin board is going to be covered by fourteen 10 inch by 10 inch pieces of paper. The bulletin board will be covered completely, and the pieces of paper will not overlap. Which of the following could be the dimensions of the bulletin board? **TAKS Obj. 7**

(F) 20 in. by 70 in. (G) 30 in. by 40 in.
(H) 50 in. by 90 in. (J) 60 in. by 40 in.

