

29. **CHALLENGE** Data from some countries in North America show a positive correlation between the average life expectancy in a country and the number of personal computers per capita in that country.
- Make a conjecture about the reason for the positive correlation between life expectancy and number of personal computers per capita.
  - Is it reasonable to conclude from the data that giving residents of a country more personal computers will lengthen their lives? *Explain.*



## MIXED REVIEW FOR TAKS

**TAKS PRACTICE** at classzone.com

### REVIEW

TAKS Preparation  
p. 66;  
TAKS Workbook

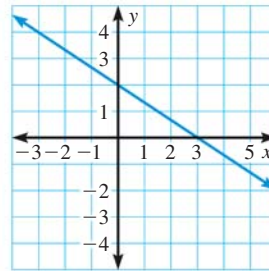
30. **TAKS PRACTICE** Ted is planting flowers in a rectangular garden. The length of the garden is 55 feet and the perimeter is 150 feet. What is the area of the garden? **TAKS Obj. 10**
- (A) 900 ft<sup>2</sup>      (B) 1100 ft<sup>2</sup>      (C) 1800 ft<sup>2</sup>      (D) 2025 ft<sup>2</sup>

### REVIEW

Lesson 2.3;  
TAKS Workbook

31. **TAKS PRACTICE** What is the  $y$ -intercept of the line shown? **TAKS Obj. 3**

- (F)  $-\frac{2}{3}$       (G)  $\frac{2}{3}$   
(H) 2      (J) 3



## QUIZ for Lessons 2.4–2.6

Write an equation of the line that satisfies the given conditions. (p. 98)

- $m = -5, b = 3$
- $m = 2, b = 12$
- $m = 4$ , passes through  $(-3, 6)$
- $m = -7$ , passes through  $(1, -4)$
- passes through  $(0, 7)$  and  $(-3, -2)$
- passes through  $(-9, 9)$  and  $(-9, 0)$

Write and graph a direct variation equation that has the given ordered pair as a solution. (p. 107)

- $(1, 2)$
- $(-2, 8)$
- $(5, -16)$
- $(12, 4)$

The variables  $x$  and  $y$  vary directly. Write an equation that relates  $x$  and  $y$ . Then find  $y$  when  $x = 8$ . (p. 107)

- $x = 4, y = 12$
- $x = -3, y = -8$
- $x = 40, y = -5$
- $x = 12, y = 2$

15. **CONCERT TICKETS** The table shows the average price of a concert ticket to one of the top 50 musical touring acts for the years 1999–2004. Write an equation that approximates the best-fitting line for the data pairs  $(x, y)$ . Use the equation to predict the average price of a ticket in 2010. (p. 113)

Years since 1999, $x$	0	1	2	3	4	5
Ticket price (dollars), $y$	38.56	44.80	46.69	50.81	51.81	58.71

