

45. **TX TAKS REASONING** The number of hours of daylight in Austin, Texas, during the month of March can be modeled by the function $l(x) = 0.03x + 11.5$ where x is the day of the month.
- Graph** Graph the function and identify its domain and range.
 - Graph** The number of hours of darkness can be modeled by the function $d(x) = 24 - l(x)$. Graph the function on the same coordinate plane as you used in part (a). Identify its domain and range.
 - CHALLENGE** Explain how you could have obtained the graph of d from the graph of l using translations and reflections.
 - CHALLENGE** What does the point where the graphs intersect mean in terms of the number of hours of daylight and darkness?



MIXED REVIEW FOR TAKS

TAKS PRACTICE at classzone.com

REVIEW

Lesson 2.5;
TAKS Workbook

46. **TX TAKS PRACTICE** Simplify the expression $8(x + 3) - 4x - (x + 1)$.

TAKS Obj. 2

- (A) $3x + 2$ (B) $3x + 4$ (C) $3x + 23$ (D) $3x + 25$

REVIEW

Skills Review
Handbook p. 916;
TAKS Workbook

47. **TX TAKS PRACTICE** A poll predicts that candidate A will receive 48% of the total votes in an election. If 60,000 people vote in the election, how many votes does the poll predict candidate A will receive? **TAKS Obj. 9**

- (F) 28,200 (G) 28,800 (H) 31,200 (J) 32,800

QUIZ for Lessons 4.6–4.7

Given that y varies directly with x , use the specified values to write a direct variation equation that relates x and y . (p. 253)

1. $x = 5, y = 10$ 2. $x = 4, y = 6$ 3. $x = 2, y = -16$

Evaluate the function. (p. 262)

4. $g(x) = 6x - 5$ when $x = 4$ 5. $h(x) = 14x + 7$ when $x = 2$
6. $j(x) = 0.2x + 12.2$ when $x = 244$ 7. $k(x) = \frac{5}{6}x + \frac{1}{3}$ when $x = 4$

Graph the function. Compare the graph to the graph of $f(x) = x$. (p. 262)

8. $g(x) = -4x$ 9. $h(x) = x - 2$

10. **HOURLY WAGE** The table shows the number of hours that you worked for each of three weeks and the amount that you were paid. What is your hourly wage? (p. 253)

Hours	12	16	14
Pay (dollars)	84	112	98