

20. **DAYLIGHT** The table shows the number of hours and minutes of daylight in Baltimore, Maryland, for ten days in January.

Day in January	5	6	7	8	9	10	11	12	13	14
Daylight (hours and minutes)	9:30	9:31	9:32	9:34	9:35	9:36	9:37	9:38	9:40	9:41

- Write an equation that models the hours of daylight (in minutes in excess of 9 hours) as a function of the number of days since January 5.
  - At what rate do the hours of daylight change over time in early January?
  - Do you expect the trend described by the equation to continue indefinitely? *Explain.*
21. **CHALLENGE** The table shows the estimated amount of time and the estimated amount of money the average person in the U.S. spent on the Internet each year from 1999 to 2005.

Year	1999	2000	2001	2002	2003	2004	2005
Internet time (hours)	88	107	136	154	169	182	193
Internet spending (dollars)	40.55	49.64	68.70	84.73	97.76	110.46	122.67

- Write an equation that models the amount of time  $h$  (in hours) spent on the Internet as a function of the number of years  $y$  since 1999.
- Write an equation that models the amount of money  $m$  spent on the Internet as a function of the time  $h$  (in hours) spent on the Internet.
- Substitute the expression that is equal to  $h$  from part (a) in the function from part (b). What does the new function tell you?
- Does the function from part (c) agree with the data given? *Explain.*



## MIXED REVIEW FOR TAKS

**TAKS PRACTICE** at classzone.com

### REVIEW

TAKS Preparation  
p. 420;  
TAKS Workbook

22. **TAKS PRACTICE** You are making a rectangular quilt with dimensions 48 inches by 60 inches. The fabric you are using costs \$1.50 per square foot. How much will the fabric for the quilt cost? **TAKS Obj. 7**

(A) \$20                      (B) \$25                      (C) \$30                      (D) \$32

### REVIEW

Lesson 4.4;  
TAKS Workbook

23. **TAKS PRACTICE** Find the slope of the line shown. **TAKS Obj. 3**

(F) -2                      (G) -1  
(H) -0.5                      (J) 2

