



45. **MULTIPLE REPRESENTATIONS** The total cost of riding the subway to and from school every day is \$1.50.
- Making a Table** Make a table that shows the number  $d$  of school days and the total cost  $C$  (in dollars) for trips to and from school for some values of  $d$ . Assume you travel to school once each school day and home from school once each school day.
  - Drawing a Graph** Graph the ordered pairs from the table and draw a ray through them.
  - Writing an Equation** Write an equation of the graph from part (b). Is it a direct variation equation? *Explain.* If there are 22 school days in one month, what will it cost to ride the subway to and from school for that month?

46. **TAKS REASONING** The table shows the average number of field goals attempted  $t$  and the average number of field goals made  $m$  per game for all NCAA Division I women's basketball teams for 9 consecutive seasons.

<b>Attempted field goals, <math>t</math></b>	61.8	61.9	61.8	60.8	59.5	59.0	58.9	59.2	58.4
<b>Field goals made, <math>m</math></b>	25.7	25.6	25.6	25.2	24.5	24.6	24.5	24.3	24.0

- Write** Why is it reasonable to use a direct variation model for this situation? Write a direct variation equation that relates  $t$  and  $m$ . Find the constant of variation to the nearest tenth.
  - Estimate** The highest average number of attempted field goals in one season was 66.2. Estimate the number of field goals made that season.
  - Explain** If the average number of field goals made was increasing rather than decreasing and the number of attempted field goals continued to decrease, would the data show direct variation? *Explain.*
47. **CHALLENGE** In Exercise 40, you found an equation showing that the distance traveled on a bike varies directly with the number of revolutions that the rear tire completes. The number  $r$  of tire revolutions varies directly with the number  $p$  of pedal revolutions. In a particular gear, you travel about 1.3 meters for every 5 revolutions of the pedals. Show that distance traveled varies directly with pedal revolutions.



## MIXED REVIEW FOR TAKS

**TAKS PRACTICE** at classzone.com

### REVIEW

Lesson 4.4;  
TAKS Workbook

48. **TAKS PRACTICE** The graph represents an employee's earnings as a function of the number of hours the employee works. How much money does the employee earn in 2 hours? *TAKS Obj. 3*

- (A) \$10                      (B) \$15  
(C) \$30                      (D) \$40

