

Name \_\_\_\_\_

**6-5B Lesson Master****Questions on SPUR Objectives**

See pages 392–395 for objectives.

**SKILLS** Objective B

In 1–6, write an equation of the line given the slope and one point on the line.

1. slope  $\frac{1}{4}$ , point (8, -3)

2. slope -2, point (-1, 4)

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3. slope  $-\frac{2}{3}$ , point (-6, -5)

4. slope 5, point  $(\frac{2}{5}, 12)$

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5. slope 0, point (-6, 15)

6. slope  $\frac{1}{2}$ , point (2.4, -3.2)

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7. The slope of a line is 5 and the  $x$ -intercept is -2. Write an equation of the line.

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8. The slope of a line is  $-\frac{1}{3}$  and the  $x$ -intercept is 4. Write an equation of the line.

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9. What is the equation of a horizontal line through the point  $(-2, \frac{3}{4})$ ?

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10. Determine an equation for the line that contains (0, 2) and is parallel to the line with equation  $y = \frac{3}{5}x$ .

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In 11 and 12, the slopes of two lines are reciprocals.

11. An equation of one line is  $y = \frac{7}{8}x + 1$ . What is the slope of the second line?

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12. Find the equation of the second line if it passes through the point (14, -10).

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Name \_\_\_\_\_

**6-5B****page 2****USES** Objective F

13. A suburban school district had an enrollment of 7,200 students in the year 2000. Enrollment has been growing at a fairly constant rate of 50 students per year.

a. Write an ordered pair described by the information. \_\_\_\_\_

b. Write the slope described by the information. \_\_\_\_\_

c. Write an equation relating the number of students in the school district  $y$  and the number of years since 2000  $x$ . \_\_\_\_\_

d. Estimate the total enrollment the school district might expect for the year 2010, if this rate of growth remains steady. \_\_\_\_\_

14. Six hundred fifty people attended a dance recital. When it was over, the theater emptied at a rate of 125 people every 5 minutes.

a. Write an ordered pair described by the information. \_\_\_\_\_

b. Write the slope described by the information. \_\_\_\_\_

c. Write an equation to represent the number of people  $p$  in the theater after  $m$  minutes. \_\_\_\_\_

d. How long will it take to empty the theater? \_\_\_\_\_

In 15 and 16, use the table below. It represents the admission and parking costs at a zoo when Cherise went with her family and some friends. Everyone rode in one car and only 2 adults went to the zoo.

Parking	\$6.75
Adult admission	\$7.00
Child admission	\$3.50

15. Let  $c$  represent the number of children who went to the zoo and let  $t$  represent the total cost of admission to the zoo. Write an equation relating  $t$  and  $c$ . \_\_\_\_\_

16. If the total costs for parking and admission were \$38.25, how many children went to the zoo on this trip? \_\_\_\_\_