Name

## 6-8B Lesson Master

**Questions on SPUR Objectives** See pages 392–395 for objectives.

**SKILLS**) Objective C

In 1-6, rewrite the equation in standard form with integer coefficients.

1. 
$$y = -8x + 5$$

**2.** 
$$y = \frac{3}{8}x - 2$$

3. 
$$y = 10 - \frac{7}{4}x$$

4. 
$$3y - 7.25x = 6.1$$

5. 
$$6.4y = \frac{1}{5}x - 11$$

6. 
$$\frac{5}{9}x = y + \frac{2}{3}$$

In 7 and 8, an equation in slope intercept form is given. Find an equivalent equation in standard form with integer coefficients.

7. 
$$y = 7x$$

8. 
$$y = -5x + 14$$

**USES**) Objective F

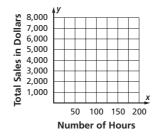
On December 3, 2006, the Jacksonville Jaguars defeated the Miami Dolphins by a score of 24 to 10. Each team scored only 7 points (touchdown and extra point) or 3 points (field goal).

- 9. For the Jaguars,
  - **a.** write an equation in standard form that describes the relationship between touchdowns/extra points *t* and field goals *f*.
  - **b.** give two solutions to this equation, where *t* and *f* are integers.
- 10. For the Dolphins,
  - **a.** write an equation in standard form that describes the relationship between touchdowns/extra points *t* and field goals *f*.
  - b. give a solution to this equation, where t and f are integers.

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- **11.** A furniture store employee earns \$8 an hour and a 20% commission on his sales. His earnings for one week were \$1,500. Let x = the number of hours the employee worked and y = the amount of his sales.
  - **a.** Write an equation in standard form that describes all the different possible combinations of the hours the employee worked and the amount of his sales.
  - b. Give three possible pairs of values of x and y.
  - **c**. Graph all possible solutions.

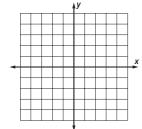


- d. If the employee worked 40 hours, what were his sales?
- e. Give the coordinates of the point on the graph corresponding to your answer to Part d.
- 12. Nancy went to the Every Blooming Thing garden center and bought small geraniums g for \$1.25 each and perennial plants p for \$3.50 each. She spent \$70, without tax.
  - a. Write an equation in standard form that describes the relationship between g and p.
  - b. Give three solutions to your equation from Part a.
  - c. If the \$70 included the cost of 15 perennial plants, how many geraniums did Nancy buy?

## **REPRESENTATIONS**) Objective H

In 13 and 14, an equation in slope-intercept form is given. Find the x- and y-intercepts of the graph of the line, and then graph the line.

**13.** 
$$6x - 2y = 12$$



14. 
$$5x + 7y = -35$$

