

Name \_\_\_\_\_

# 10-6A Lesson Master

## Questions on SPUR Objectives

See pages 650–653 for objectives.

### PROPERTIES Objective F

In 1–3, describe the graph of the given system as *intersecting lines*, *parallel lines*, or *coincident lines*.

1. 
$$\begin{cases} 4x - 5y = -23 \\ y = 3x + 9 \end{cases}$$

2. 
$$\begin{cases} 6x - 4y = 12 \\ 3x - 2y = -6 \end{cases}$$

3. 
$$\begin{cases} y = \frac{1}{4}x - 2 \\ 2x - 8y = 16 \end{cases}$$

4. Find the value of  $k$  so the graphs of the equations in the system

$$\begin{cases} 6x - 4y = 12 \\ kx + 6y = 6 \end{cases} \text{ are parallel lines.}$$

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5. *True or False.* If  $a = 10$ , the system  $\begin{cases} ax + 5y = 15 \\ 14x + 7y = 21 \end{cases}$  will have infinitely many solutions.

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### USES Objective G

6. One week at a store, Gary bought 2 sweaters and 3 shirts for \$165. The store had a sale the next week advertising 15% off all items. During the sale week, Tyrone purchased a sweater and 4 shirts for a total of \$123.25. Did Tyrone get the correct sale discount? Explain.

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### REPRESENTATIONS Objective I

In 7–9, match each system of equations to its corresponding graph and state the number of solutions. Each system is graphed in the standard window.

7. 
$$\begin{cases} 8 - x = 4y \\ 2x + 8y = -40 \end{cases}$$

8. 
$$\begin{cases} 4x + 2y = 8 \\ y + 2x = 4 \end{cases}$$

9. 
$$\begin{cases} 2x - 8y = 14 \\ x + 4y = -1 \end{cases}$$

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