

Name _____

10-2A Lesson Master**Questions on SPUR Objectives**

See pages 650–653 for objectives.

SKILLS Objective A

In 1–6, a system is given. Use substitution to find the solution.

1.
$$\begin{cases} y = 2x + 4 \\ y = -x + 7 \end{cases}$$

2.
$$\begin{cases} n = -4m + 9 \\ n = 2m + 6 \end{cases}$$

3.
$$\begin{cases} y = 5x - 8 \\ y = -\frac{1}{2}x + 3 \end{cases}$$

4.
$$\begin{cases} b = \frac{1}{3}a - 3 \\ b = -\frac{1}{6}a \end{cases}$$

5.
$$\begin{cases} d = 2c - 5 \\ d = 0.25c - 1.5 \end{cases}$$

6.
$$\begin{cases} y = 2x + 7 \\ y = -3x - 10 \end{cases}$$

USES Objective G

7. Kalyn gives her twin sister Gabrielle a 15-meter head start in a 100-meter swim. Kalyn swims at a pace of 5 meters per second and Gabrielle swims at a pace of 4 meters per second. Can Kalyn catch up to her sister before the end of the swim? If so, at what point?
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8. Suppose a car taxi ride costs \$2.00 plus \$1.75 for each mile. A bike taxi ride costs \$12.00 plus \$0.50 for each mile. For what distance are the costs the same? What is the cost at this distance?
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