Name

10-5B Lesson Master

Questions on SPUR Objectives
See pages 650–653 for objectives.

SKILLS Objective B

1. Consider the system $\begin{cases} 3x - 2y = -5 \\ 6x - 3y = -12 \end{cases}$.

   a. What operation was done to the system to get $\begin{cases} -6x + 4y = 10 \\ 6x - 3y = -12 \end{cases}$? _____

   b. Solve the system. _____

2. Consider the system $\begin{cases} 2c + 8d = 68 \\ 4c - 2d = 28 \end{cases}$.

   a. If the second equation in the system is multiplied by 4, then adding the equations will eliminate what variable? _____

   b. Solve the system. _____

3. Consider the system $\begin{cases} 2x - y = -13 \\ 3x + 2y = -2 \end{cases}$.

   a. If the first equation in the system is multiplied by 2, then adding the equations will eliminate what variable? _____

   b. Solve the system. _____

In 4–6, solve the system.

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

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

6. $\begin{cases} 2a - 5b = 31 \\ 8a + b = 19 \end{cases}$ _____

Name

10-5B page 2

In 7–9, solve the system.

7. $\begin{cases} \frac{1}{2}m + \frac{3}{2}n = -5 \\ \frac{7}{2}m - \frac{5}{2}n = 43 \end{cases}$

8. $\begin{cases} 0.5x - 0.2y = 0 \\ 0.4x + 0.8y = 0 \end{cases}$

9. $\begin{cases} \frac{4}{5}x + y = 1 \\ 2x - \frac{10}{3}y = -1 \end{cases}$

USES Objective G

10. The difference of the smaller of two integers and twice the larger integer is –7. The sum of –3 times the smaller integer and 5 times the larger integer is 18. What are the two integers?

11. At an ice cream store, one family bought three medium ice cream cones and two sundaes for $9. Another family bought five medium cones and one sundae for $9.75. What is the cost of a sundae and what is the cost of a medium ice cream cone at the store?

12. At a dog park, an observer noticed that, counting all of the dogs and people, there were 80 legs and 25 heads in the crowd. How many dogs were at the park? How many people were at the park?

13. At a library book sale, paperback books cost $0.50 each and hardback books cost $1.25 each. At the sale, they sold 80 books and made $62.50. How many paperback books did they sell? How many hardback books did they sell?