Name

10-4B Lesson Master

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

SKILLS Objective B

In 1–8, a system is given. Solve the system using addition.

1. $\begin{cases} 3x - 2y = -5 \\ 4x + 2y = -16 \end{cases}$

2. $\begin{cases} 3r - 5s = -7 \\ -3r + 2s = 1 \end{cases}$

3. $\begin{cases} 2m - n = 4 \\ 1.2m - 0.3n = 1.5 \end{cases}$

4. $\begin{cases} x - y = -\frac{1}{5} \\ 10x + 5y = 7 \end{cases}$

5. $\begin{cases} 3a - 2b = -8 \\ -3a + 4b = 16 \end{cases}$

6. $\begin{cases} \frac{1}{2}m - n = -30 \\ m + n = 15 \end{cases}$

7. $\begin{cases} 2a + b = -80 \\ -3a + b = 120 \end{cases}$

8. $\begin{cases} 4x - 2y = 0 \\ 4x + y = 0 \end{cases}$

Name

9. The ordered pair $(H, K) = (134, 256)$ is the solution to the system of equations $\begin{cases} 5H + 6K = 2{,}206 \\ -8H + 3K = -304 \end{cases}$. Check the solution in both equations.

10. Is $(x, y) = (-100, 3)$ a solution to the system of equations $\begin{cases} 4x - 2y = -406, \\ 3x + 5y = -315 \end{cases}$? Explain.

USES Objective G

11. Two people paddle a canoe 8 miles upstream in two hours. Then they turn around and paddle 8 miles downstream in one hour. If they are paddling at the same rate both upstream and downstream, how fast are they paddling? How fast is the current?

12. A family has adopted a total of 13 cats and dogs from the local animal shelter. The number of cats they have is 2 less than twice the number of dogs. How many cats and dogs do they have?

13. At a furniture store, you can purchase 2 floor lamps and 3 table lamps for $360, or 3 floor lamps and 1 table lamp for $330. What is the cost of one floor lamp? What is the cost of one table lamp?

14. On a lunch menu, a turkey sandwich with a cup of soup is $6.00 and a half of a turkey sandwich with a cup of soup is $3.75. Assuming the half sandwich costs exactly half as much as the whole sandwich, how much does the cup of soup cost?