## **Lesson Master**

**Questions on SPUR Objectives** 

See Student Edition pages 367-371 for objectives.

**VOCABULARY** 

1. The solution to the system  $\begin{cases} y = x + 3 \\ y = -x - 1 \end{cases}$  is x = -2, y = 1. Name and show three ways of writing this solution.

**PROPERTIES** 

Objective D

2. How many solutions are there for the system  $\begin{cases} 3x + y = -1 \\ 2x + 3y = -17 \end{cases}$ ? Justify your answer.

3. Explain how the table at the right gives the

solution to the system $\begin{cases} y = 4x - 9 \\ y = 2x - 6 \end{cases}$	
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Х	y=4x-9	y=2x-6		
-1	-13	-8		
-0.5	-11	-7		
0	-9	-6		
0.5	-7	-5		
1	-5	-4		
1.5	-3	-3		
2	-1	-2		

Objective F USES

- 4. Hotel Oakwood charges \$40 a night for two people plus \$5 for each additional person. Pine Valley Lodge charges \$38 a night for two people plus \$6 for each additional person.
  - a. Write an equation for the cost y with x additional people in a room for one night at each place.

Hotel Oakwood \_

Pine Valley Lodge \_\_\_\_\_

b. For how many additional people will the rate for the two rooms be the same?

5-2B

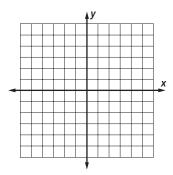
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## **REPRESENTATIONS**) Objective I

In 5–8, a. sketch a graph of the system, b. estimate any intersection point to the nearest tenth, and c. give a CAS command that you could use to verify your answer.

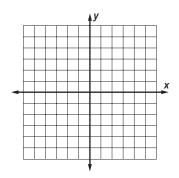
5. 
$$\begin{cases} 2x + 4y = 6 \\ x + y = -1 \end{cases}$$

a.



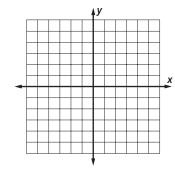
7. 
$$\begin{cases} y = \frac{4}{x} \\ y = x \end{cases}$$

a.



6. 
$$\begin{cases} 8x - 4y = 12 \\ y = 2x + 3 \end{cases}$$

a.



8. 
$$\begin{cases} y = \frac{2}{x} \\ y = x^2 \end{cases}$$

a.

