

Name \_\_\_\_\_

**10-10B Lesson Master****Questions on SPUR Objectives**

See pages 650–653 for objectives.

**SKILLS** Objective E

In 1-6, solve the system.

1. 
$$\begin{cases} 4y = 9x^2 \\ y - x^2 = 10 \end{cases}$$

2. 
$$\begin{cases} 3y = 2x^2 + 3 \\ 7x^2 + 2y = 4 \end{cases}$$

3. 
$$\begin{cases} y = -x^2 + 6x - 9 \\ y = -x + 1 \end{cases}$$

4. 
$$\begin{cases} y = x^2 + 6x + 7 \\ y = x + 1 \end{cases}$$

5. 
$$\begin{cases} y = \frac{1}{2}(x - 3)^2 - 1 \\ y = 1 \end{cases}$$

6. 
$$\begin{cases} y = x^2 + 2x + 4 \\ y = (x - 2)^2 \end{cases}$$

In 7 and 8, true or false.

7. The ordered pair  $(-1, 5)$  is a solution to

the system 
$$\begin{cases} y = 3 + 2x^2 \\ y = 2x + 3 \end{cases}$$

8. The ordered pair  $(11, -3)$  is a solution to

the system 
$$\begin{cases} x = y^2 + 2 \\ y = 2x - 25 \end{cases}$$

In 9 and 10, how many solutions does the system have?

9. 
$$\begin{cases} y = x^2 - 6x + 11 \\ y = -x^2 + 6x - 7 \end{cases}$$
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10. 
$$\begin{cases} y = x^2 - 4x + 14 \\ y = x^2 + 10x + 23 \end{cases}$$
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**10-10B**

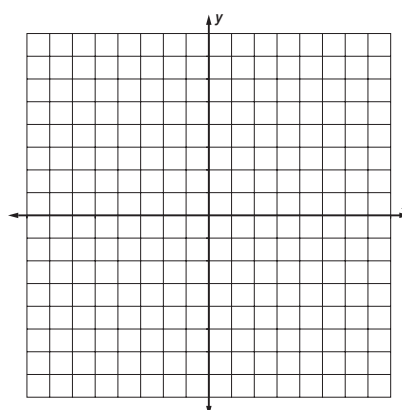
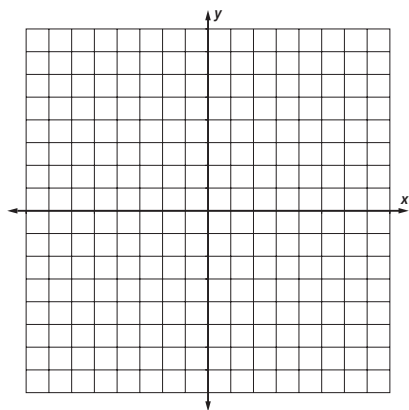
page 2

**REPRESENTATIONS** Objective I

In 11-14, solve the system by graphing.

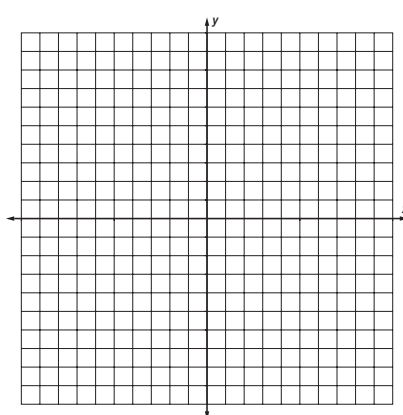
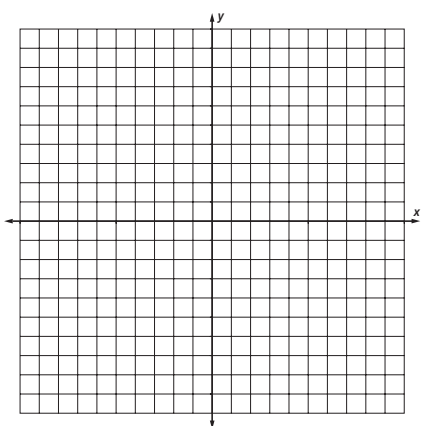
11.  $\begin{cases} y = -x^2 + 3 \\ y = -2x + 3 \end{cases}$

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



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

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



15. Consider the graph of the system  $\begin{cases} y = x^2 - 6x + 6 \\ y = -x^2 + 6x - 11 \end{cases}$  as shown to the right. Use the graph to approximate the solutions to the system.

