

**5-1****Skills Practice****Graphing Systems of Equations**

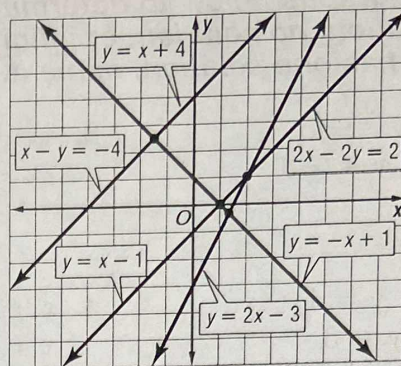
Use the graph at the right to determine whether each system has *no* solution, *one* solution, or *infinitely many* solutions.

$$\begin{aligned} 1. \quad &y = x - 1 \\ &y = -x + 1 \end{aligned}$$

$$\begin{aligned} 3. \quad &y = x + 4 \\ &2x - 2y = 2 \end{aligned}$$

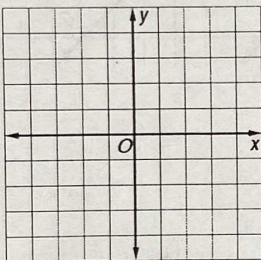
$$\begin{aligned} 2. \quad &x - y = -4 \\ &y = x + 4 \end{aligned}$$

$$\begin{aligned} 4. \quad &y = 2x - 3 \\ &2x - 2y = 2 \end{aligned}$$

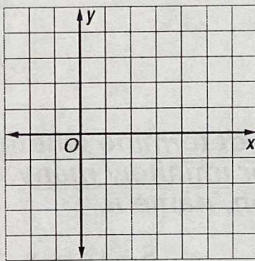


Graph each system of equations. Then determine whether the system has *no* solution, *one* solution, or *infinitely many* solutions. If the system has one solution, name it.

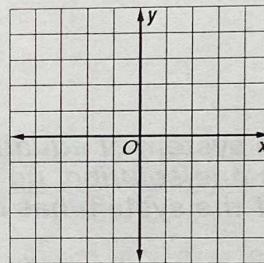
$$\begin{aligned} 5. \quad &2x - y = 1 \\ &y = -3 \end{aligned}$$



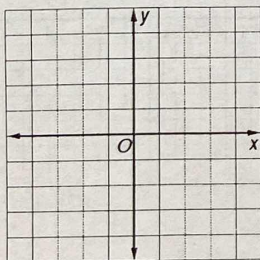
$$\begin{aligned} 6. \quad &x = 1 \\ &2x + y = 4 \end{aligned}$$



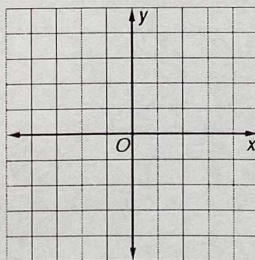
$$\begin{aligned} 7. \quad &3x + y = -3 \\ &3x + y = 3 \end{aligned}$$



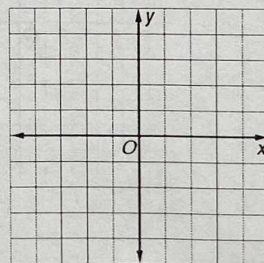
$$\begin{aligned} 8. \quad &y = x + 2 \\ &x - y = -2 \end{aligned}$$



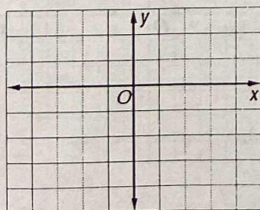
$$\begin{aligned} 9. \quad &x + 3y = -3 \\ &x - 3y = -3 \end{aligned}$$



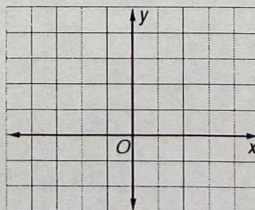
$$\begin{aligned} 10. \quad &y - x = -1 \\ &x + y = 3 \end{aligned}$$



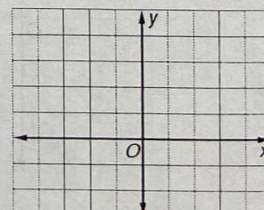
$$\begin{aligned} 11. \quad &x - y = 3 \\ &x - 2y = 3 \end{aligned}$$



$$\begin{aligned} 12. \quad &x + 2y = 4 \\ &y = -\frac{1}{2}x + 2 \end{aligned}$$



$$\begin{aligned} 13. \quad &y = 2x + 3 \\ &3y = 6x - 6 \end{aligned}$$





## Practice

Student Edition

Pages 454-461

## Graphing Systems of Equations

Use the graphs below to determine whether each system has one solution, no solution, or infinitely many solutions. If the system has one solution, name it.

$$\begin{aligned} 1. \quad x + y &= -3 \\ 2x - y &= -3 \end{aligned}$$

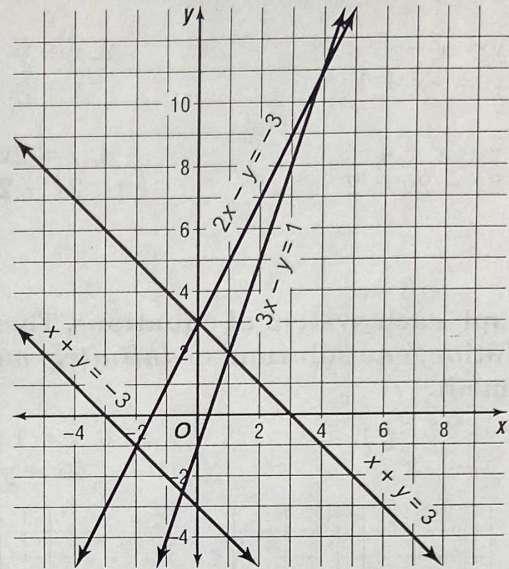
$$\begin{aligned} 2. \quad 4x - 2y &= -6 \\ 2x - y &= -3 \end{aligned}$$

$$\begin{aligned} 3. \quad 3x - y &= 1 \\ x + y &= 3 \end{aligned}$$

$$\begin{aligned} 4. \quad x + y &= -3 \\ x + y &= 3 \end{aligned}$$

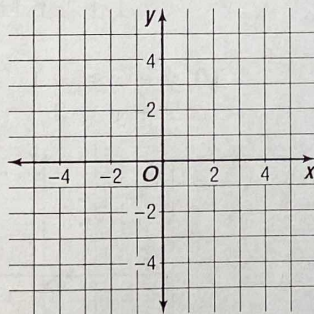
$$\begin{aligned} 5. \quad x + y &= 3 \\ 2x - y &= -3 \end{aligned}$$

$$\begin{aligned} 6. \quad 2x - y &= -3 \\ 3x - y &= 1 \end{aligned}$$

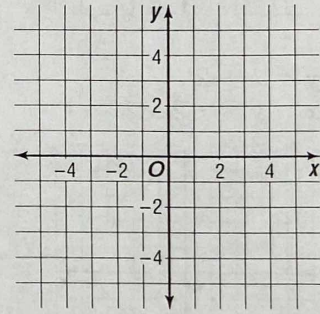


Graph each system of equations. Then determine whether the system has one solution, no solution, or infinitely many solutions. If the system has one solution, name it.

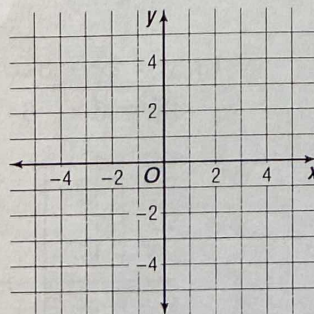
$$\begin{aligned} 7. \quad x - y &= 3 \\ x - 2y &= 3 \end{aligned}$$



$$\begin{aligned} 8. \quad 3x - y &= -4 \\ 3x - y &= 0 \end{aligned}$$



$$\begin{aligned} 9. \quad y &= 2x - 3 \\ 4x &= 2y + 6 \end{aligned}$$



$$\begin{aligned} 10. \quad x + 2y &= 3 \\ 3x - y &= -5 \end{aligned}$$

