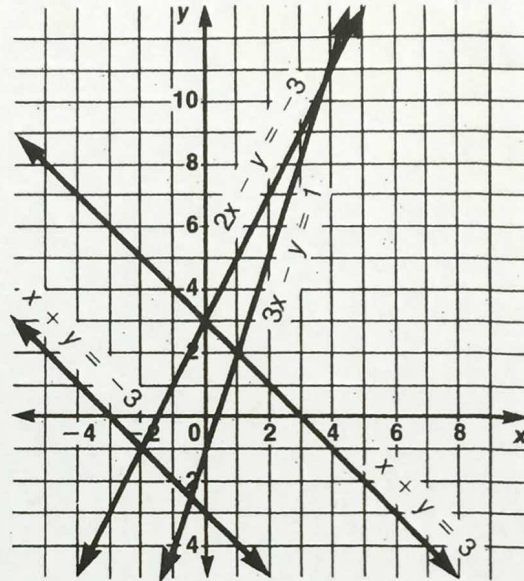


# 11-2 Practice Worksheet

## Graphing Systems of Equations

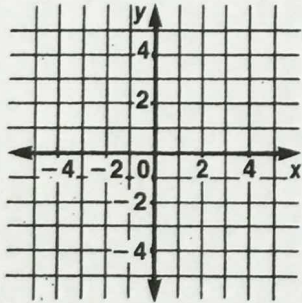
Use the graphs at the right to determine whether each system has one solution, no solution, or infinitely many solutions. If the system has one solution, name it.

- |                                  |                                    |
|----------------------------------|------------------------------------|
| 1. $x + y = -3$<br>$2x - y = -3$ | 2. $4x - 2y = -6$<br>$2x - y = -3$ |
| 3. $3x - y = 1$<br>$x + y = 3$   | 4. $x + y = -3$<br>$x + y = 3$     |
| 5. $x + y = 3$<br>$2x - y = -3$  | 6. $2x - y = -3$<br>$3x - y = 1$   |

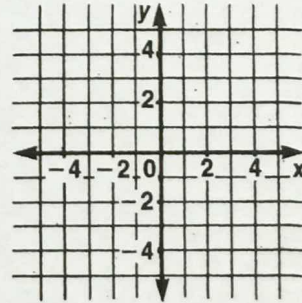


Graph each system of equations. Then determine whether the system has one solution, no solution, or infinitely many solutions. If the system has one solution, name it.

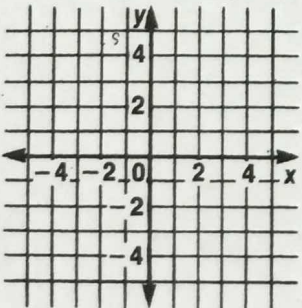
7.  $x - y = 3$   
 $x - 2y = 3$



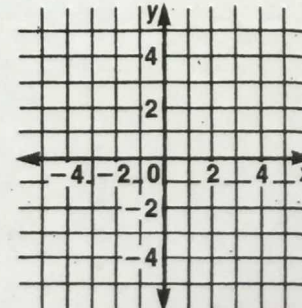
8.  $3x - y = -4$   
 $3x - y = 0$



9.  $y = 2x - 3$   
 $4x = 2y + 6$



10.  $x + 2y = 3$   
 $3x - y = -5$



**11-3****Practice Worksheet****Substitution**

Use substitution to solve each system of equations. If the system does not have exactly one solution, state whether it has no solution or infinitely many solutions.

$$\begin{aligned} 1. \quad & y = 4x \\ & x + y = 5 \end{aligned}$$

$$\begin{aligned} 2. \quad & x = -4y \\ & 3x + 2y = 20 \end{aligned}$$

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

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

$$\begin{aligned} 5. \quad & x + 5y = 4 \\ & 3x + 15y = -1 \end{aligned}$$

$$\begin{aligned} 6. \quad & x - 5y = 10 \\ & 2x - 10y = 20 \end{aligned}$$

$$\begin{aligned} 7. \quad & x + 4y = 8 \\ & 2x - 5y = 29 \end{aligned}$$

$$\begin{aligned} 8. \quad & 4x + y = 0 \\ & x + 2y = -7 \end{aligned}$$

$$\begin{aligned} 9. \quad & 2x - 3y = -24 \\ & x + 6y = 18 \end{aligned}$$

$$\begin{aligned} 10. \quad & x + 14y = 84 \\ & 2x - 7y = -7 \end{aligned}$$

$$\begin{aligned} 11. \quad & 0.3x - 0.2y = 0.5 \\ & x + 2y = 15 \end{aligned}$$

$$\begin{aligned} 12. \quad & x - 3y = -4 \\ & 2x + 6y = 5 \end{aligned}$$

$$\begin{aligned} 13. \quad & 3x - 2y = 11 \\ & x - \frac{7}{2} = 4 \end{aligned}$$

$$\begin{aligned} 14. \quad & \frac{1}{2}x + 2y = 12 \\ & x - 2y = 6 \end{aligned}$$

$$\begin{aligned} 15. \quad & \frac{x}{3} - y = 3 \\ & 2x + y = 25 \end{aligned}$$