Practice B

Using Graphs and Tables to Solve Linear Systems

Classify each system, and determine the number of solutions.

1.
$$\begin{cases} y = -4x + 7 \\ 12x + 3y = 21 \end{cases}$$

2.
$$\begin{cases} 5y = x - 10 \\ y = \frac{x}{5} + 3 \end{cases}$$

3.
$$\begin{cases} x + 6y = -2 \\ 12x - 6y = 0 \end{cases}$$

Use substitution to determine if the given ordered pair is an element of the solution set for the system of equations. If it is not, give the correct solution.

4.
$$(-4, 8)$$
 $\begin{cases} y = -2x \\ 3x + y = -4 \end{cases}$

5. (11, 3)
$$\begin{cases} y = x - 8 \\ x + 4y = -2 \end{cases}$$

6.
$$(4, 1)$$
 $\begin{cases} y = 5x - 1 \\ 8 = 4x + y \end{cases}$

7.
$$(5, -5)$$
 $\begin{cases} x + y = 10 \\ x - y = 0 \end{cases}$

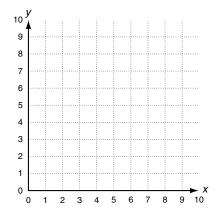
8.
$$(2, -1)$$

$$\begin{cases} 2x + 3y = -8 \\ 3x - 4y = 5 \end{cases}$$

9.
$$(0,3)$$
 $\begin{cases} 3x + 5y = 15 \\ x - y = -3 \end{cases}$

Solve by graphing a system of equations.

10. A puppy pen is 1 foot longer than twice its width. John wants to increase the length and width by 5 feet each to enlarge the area by 90 square feet. What will be the area of the new pen?



11. Keesha has 10 more quarters than dimes, which, together, total \$11.25. How many coins does she have in quarters and dimes?

