

[Due on Monday 10/28/19]

**Directions:** Use the given ordered pair to determine if it is a solution to the system of linear equations.

[Notes #44]

1.  $(2, 1); \begin{cases} x + 2y = 4 \\ 3x - 2y = 4 \end{cases}$

2.  $(-3, 2); \begin{cases} x + 3y = 3 \\ 3x - 2y = 13 \end{cases}$

**Directions:** Solve each system by graphing.

[Notes #44]

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

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

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

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

7.  $\begin{cases} y = 2 \\ y - 4 = x \end{cases}$

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

**Directions:** Solve the following systems of inequalities by graphing.

[Notes #44]

9.  $\begin{cases} y \leq 2x + 2 \\ y < -x + 1 \end{cases}$

10.  $\begin{cases} -2y < 4x + 2 \\ y > 2x + 1 \end{cases}$

11.  $\begin{cases} -x - y \leq 2 \\ y - 2x > 1 \end{cases}$

12.  $\begin{cases} x < -3 \\ x > -3 \end{cases}$

13.  $\begin{cases} y < x \\ x \geq 2 \end{cases}$

**Directions:** Use the elimination method to solve each of the systems of equations below.

[Notes #45-46]

14.  $\begin{cases} 2x + 3y = 12 \\ 8x - 6y = 24 \end{cases}$

15.  $\begin{cases} 5x + 2y = 7 \\ 3x + 7y = 10 \end{cases}$

16.  $\begin{cases} 3x - y = 4 \\ 2x - 3y = -9 \end{cases}$

Directions: Use the substitution method to solve each of the systems of equations below.

[Notes #45-46]

17. 
$$\begin{cases} y = x + 4 \\ y = 3x \end{cases}$$

18. 
$$\begin{cases} 2x + 4y = -6 \\ x - 3y = 7 \end{cases}$$

19. 
$$\begin{cases} 3x + 5y = 2 \\ x + 4y = -4 \end{cases}$$



