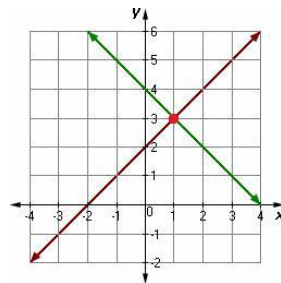


Algebra 2 – Unit 3 Test Review

1. What is a system of equations?
2. How many solutions does two intersecting lines have?
3. The graph of parallel lines has how many solutions?
4. What are the three ways to solve a system of equations.
5. Determine the solution to the system of equation to the right:

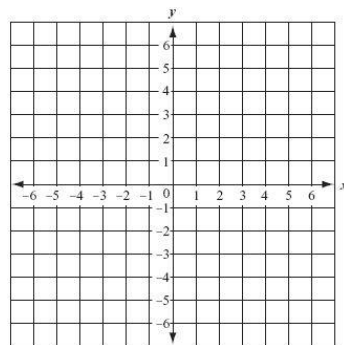


6. If one of the solutions of the system below is $x=2$, then what does y equal?

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

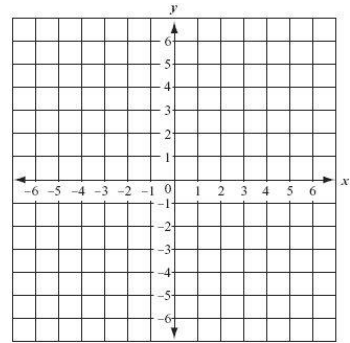
7. Solve the system of equations by graphing:

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



8. Solve the system of equations by graphing:

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



9. Solve the system of equations:

$$\begin{cases} y = -4x + 3 \\ y = -2x - 1 \end{cases}$$

10. Solve the system of equations:

$$\begin{cases} y = -4x + 10 \\ y = -3x + 8 \end{cases}$$

11. Solve the system of equations:

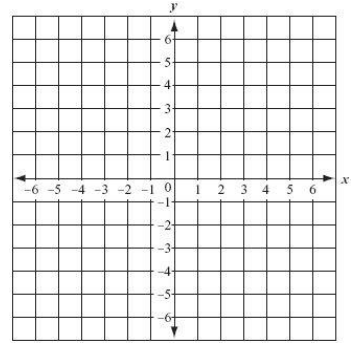
$$\begin{cases} -5x + 4y = -2 \\ -5x - 4y = -18 \end{cases}$$

12. Solve the system of equations:

$$\begin{cases} -7x + 6y = -14 \\ -x - y = -2 \end{cases}$$

13. Solve the system of inequality:

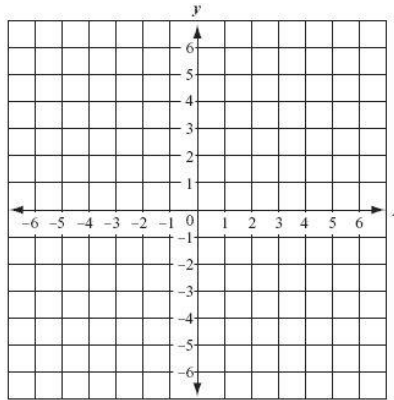
$$\begin{cases} y \geq 5x - 3 \\ y \geq -x + 3 \end{cases}$$



Solve each of the following system by the specified way, remember to express each of your answers as an ordered pair if possible:

Solve the following system of equations by graphing:

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



14. Solve the following system of equation by substitution:

$$\begin{cases} y = 2x - 7 \\ y = x - 3 \end{cases}$$

15. Solve the following system of equation by elimination:

$$\begin{cases} 4x + 3y = 15 \\ -4x + 4y = 20 \end{cases}$$

16. Solve the following system of equations by ANY method:

$$\begin{cases} -2x - 2y = -10 \\ x + 2y = 8 \end{cases}$$

17. Solve the system of linear inequalities:

$$\begin{cases} y > 5x - 2 \\ y \leq x + 2 \end{cases}$$

