Name: KEY Class: _____ Date: _____ Review

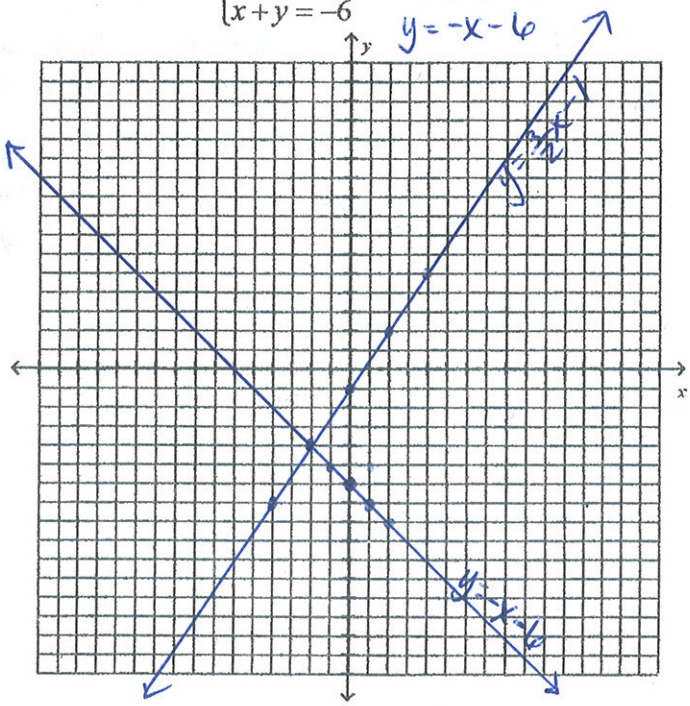
Pre-Algebra - Chapter 8 - Systems of Equations and Inequalities Review #2

Short Answer

1. Solve the system $\begin{cases} -3x+2y=-2 \\ x+y=-6 \end{cases}$ by graphing.

$y=\frac{3}{2}x-1$

$y=-x-6$



$(-2,-4)$

2. Solve $\begin{cases} 2x+y=-5 \\ y=x+4 \end{cases}$ by using substitution. Express your answer as an ordered pair.

$\boxed{(-3,1)}$

3. Solve the system of equations using any method.

$\begin{cases} x-4y=5 \\ 3x-4y=-1 \end{cases}$

$\boxed{(-3,-2)}$

4. Solve the system of equations using any method.

$y=2x+0$

$y=1x+5$

$\boxed{(5,10)}$

5. Solve $\begin{cases} -6x-3y=27 \\ 3x+3y=-9 \end{cases}$ by using elimination. Express your answer as an ordered pair.

$\boxed{(-6,3)}$

6. Solve the system of equations using any method.

$\begin{cases} y=-2x-9 \\ 2x+y=9 \end{cases}$

No Solution

7. Solve the system of equations using any method.

$\begin{cases} y=2x-4 \\ 2x-y-4=0 \end{cases}$

Infinitely Many Solutions

8. Solve the system of equations using any method.

$\begin{cases} 5x-2y=21 \\ 2x+3y=16 \end{cases}$

$\boxed{(5,2)}$

9. Solve the system of equations using any method.

$-2x+3y=-12$

$-3x+3y=-9$

$\boxed{(-3,-6)}$

10. Solve the system of equations using any method.

$\begin{cases} x+3y=29 \\ x+3y=29 \end{cases}$

Infinitely Many Solutions

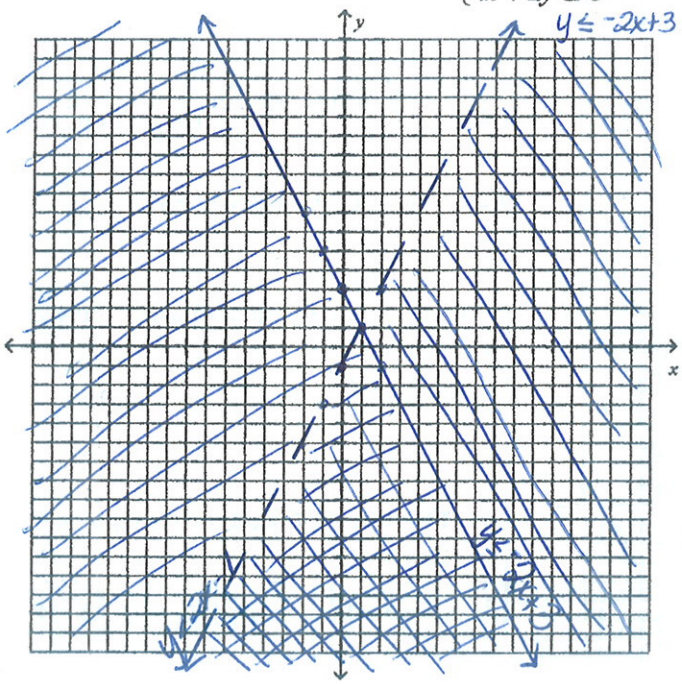
Name: KEY

Review

11. Graph the system of linear inequalities $\begin{cases} 2x - y > 1 \\ 4x + 2y \le 6 \end{cases}$.

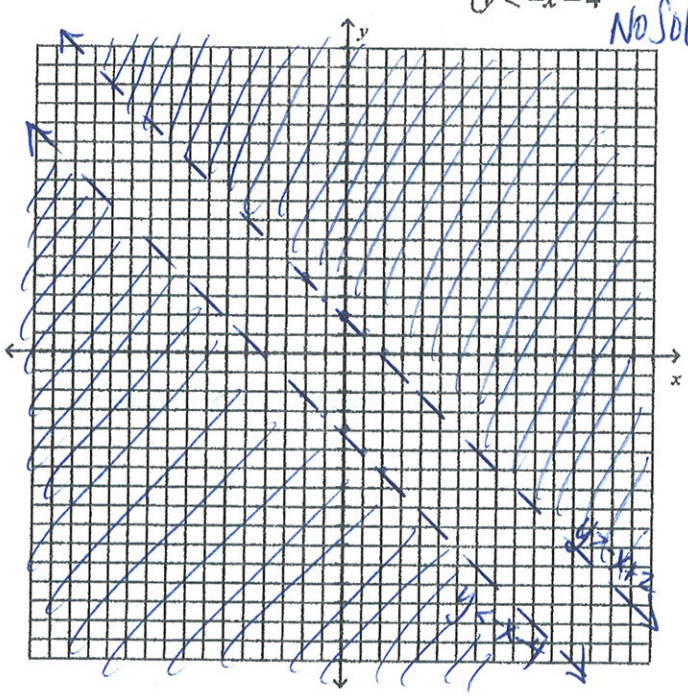
$y < 2x - 1$

$y \le -2x + 3$



12. Graph the system of linear inequalities $\begin{cases} y > -x + 2 \\ y < -x - 4 \end{cases}$.

No Solution



13. At the local pet store, zebra fish cost \$1.80 each and neon tetras cost \$2.20 each. If Ernesto bought 13 fish for a total cost of \$25.00, not including tax, how many of each type of fish did he buy?

Ernesto bought 9 zebra fish and 4 neon tetras.

14. The sum of two numbers is 27. One number is 3 more than the other. Find the two numbers.

The numbers are 12 and 15.

15. Sarah has 24 dimes and nickels worth \$1.45. How many dimes does she have?

Sarah has 5 dimes.