Review Worksheet for Unit 2 Quiz #2

Name_____ Class Period_____

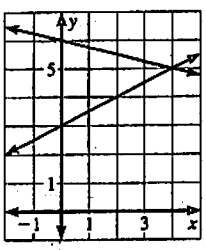
Determine if the given point is a solution to the system of equations: $\begin{aligned} -x+y&=-2 \\ 2x+y&=10 \end{aligned}$

1. $(-4,-2)$

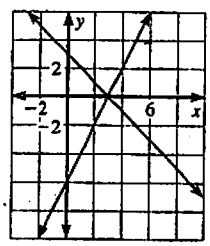
2. $(4,2)$

Use the graph to solve the linear system. Check your answer algebraically.

3. $\begin{aligned} -x+2y&=6 \\ x+4y&=24 \end{aligned}$

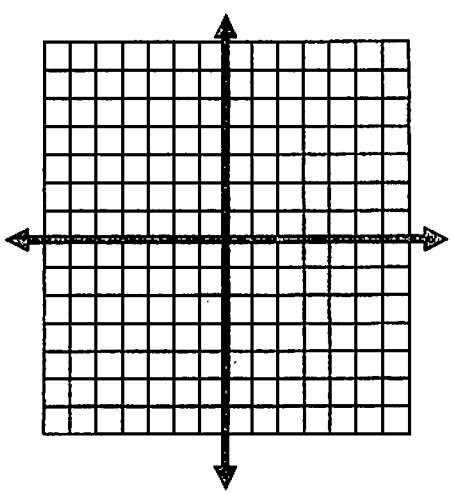


4. $\begin{aligned} x+y&=3 \\ -2x+y&=-6 \end{aligned}$

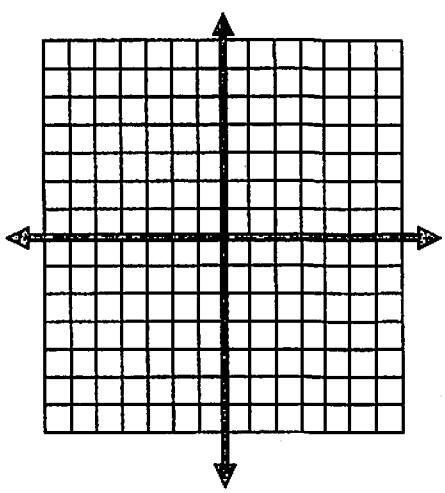


Find the solution of the linear system <u>graphically</u>. Write your solution in the blank provided.

_____5. $\begin{aligned} y&=-x+3 \\ y&=x+1 \end{aligned}$



_____6. $\begin{aligned} y&=-2x+7 \\ -3x+6y&=12 \end{aligned}$



Use substitution to solve the linear system. SHOW ALL WORK and write your solution in the space provided.

_____7. $y = 2x - 2$
$6x + 2y = 16$

_____8. $4x - y = -6$
$y = 2x + 2$

Use elimination to solve the linear system. SHOW ALL WORK and write your solution in the space provided.

_____9. $5x - 3y = 7$
$x + 3y = 5$

_____10. $-3x + 3y = -9$
$6x + 2y = 2$

Use any method to solve the linear system. SHOW ALL WORK and write your solution in the space provided.

_____11. $6x - 9y = 18$
$2x - 3y = 10$

_____12. $x - 2y = 5$
$3x - 5y = 8$

Systems of Linear Equations Word Problems

13. Bill wants to buy some CDs at the music store. Used ones sell for $4.99, and new ones sell for $13.99. He has $75 to spend that he got for his birthday. Write an equation for this scenario and decide if Bill can buy 4 used and 4 new CDs?

14. A store sold 32 pairs of jeans for a total of $1050. Brand A sold for $30 per pair and Brand B sold for $35 per pair. How many of Brand A were sold?

15. You are selling tickets for a basketball game. Student tickets cost $3 and general admission tickets cost $5. You sell 350 tickets and collect $1450. How many of each type of ticket did you sell?