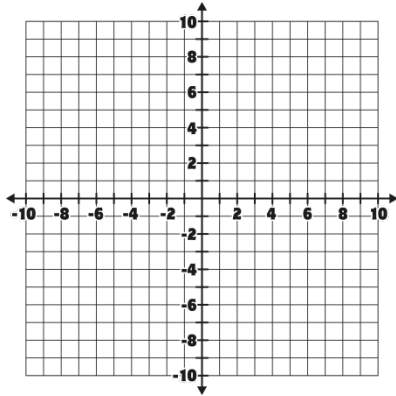


Solving Systems of Linear Equations Homework

NAME _____

Solve the system by graphing.

$$\begin{aligned} 1.) \quad & y = x + 4 \\ & y = -x + 6 \end{aligned}$$



Solve each system using substitution or elimination.

$$\begin{aligned} 2.) \quad & y = -x + 4 \\ & 5x + y = 16 \end{aligned}$$

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

$$\begin{aligned} 4.) \quad & 2x + 3y = -5 \\ & 2x - y = 7 \end{aligned}$$

5.) Given that $(6, y)$ and $(4, 7)$ are two points on a line with a slope of 2, find the value of y .

6.) Show that $y = 5x + 6$ is equivalent to $2y - 10x = 12$.

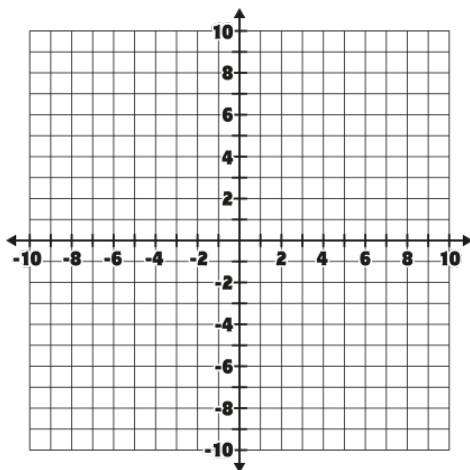
7.) Write a linear equation in standard form to model the data in the table.

x	-2	0	2	4	6
y	3	7	11	15	19

8.) Find the greatest common factor of 25, 35, and 90.

9.) Find the equation of the line parallel to $y = 3x - 4$ that goes through the point $(-1, 2)$. Write your linear equation in slope-intercept form.

10.) Graph $2x - 6y = 18$.

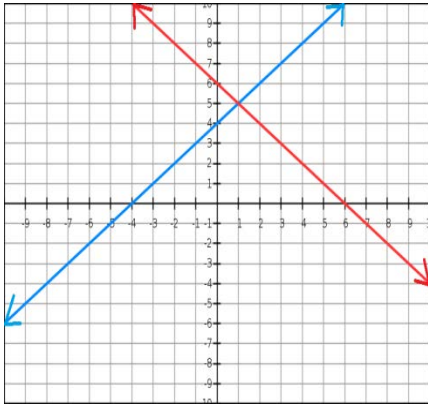


Solving Systems of Linear Equations Homework

NAME ANSWER KEY

Solve the system by graphing.

$$\begin{aligned} 1.) \quad & y = x + 4 \quad (1, 5) \\ & y = -x + 6 \end{aligned}$$



Solve each system using substitution or elimination.

$$\begin{aligned} 2.) \quad & y = -x + 4 \quad (3, 1) \\ & 5x + y = 16 \end{aligned}$$

$$\begin{aligned} 3.) \quad & y = 7x + 12 \quad (-3, -9) \\ & y = -6 + x \end{aligned}$$

$$\begin{aligned} 4.) \quad & 2x + 3y = -5 \quad (2, -3) \\ & 2x - y = 7 \end{aligned}$$

5.) Given that $(6, y)$ and $(4, 7)$ are two points on a line with a slope of 2, find the value of y . $y = 11$

6.) Show that $y = 5x + 6$ is equivalent to $2y - 10x = 12$. **Multiply by 2 ($2y = 10x + 12$), subtract $10x$ from both sides.**

7.) Write a linear equation in standard form to model the data in the table.

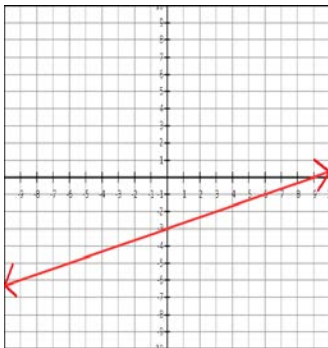
x	-2	0	2	4	6
y	3	7	11	15	19

$$-2x + y = 7 \text{ or } 2x + -y = -7$$

8.) Find the greatest common factor of 25, 35, and 90. 5

9.) Find the equation of the line parallel to $y = 3x - 4$ that goes through the point $(-1, 2)$. Write your linear equation in slope-intercept form. $y = 3x + 5$

10.) Graph $2x - 6y = 18$.



Special thanks to:

graphsketch.com

