Selected Answers

Name:_____ Period:_____

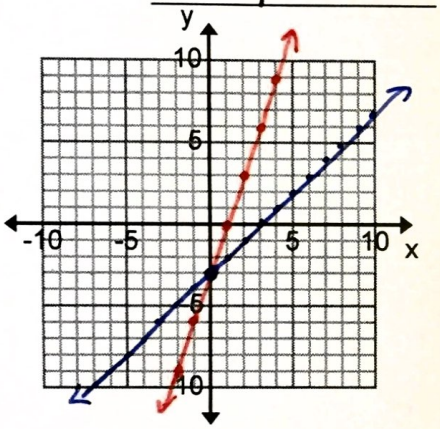
Score: _____/_____

HW 6-2 HONORS: Solve Systems of Equations using Graphs & Substitution

Instructions: Graph the following equations and tell the coordinates of where they intersect.

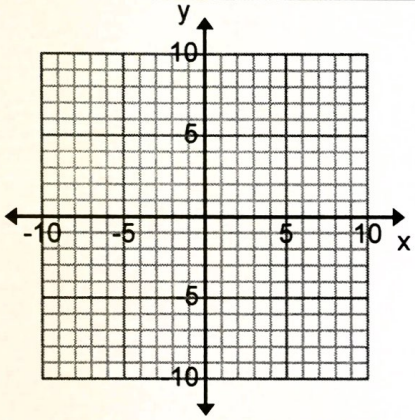
1) $y = 3x - 3$
$y = x - 3$

Solution: (0, -3)



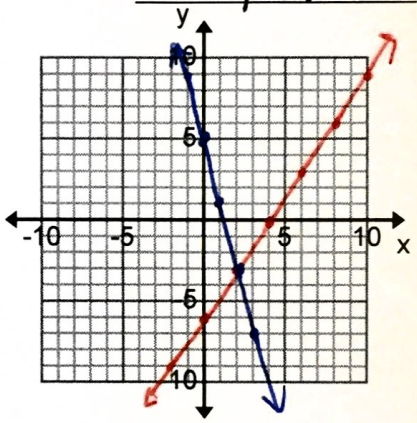
2) $y = \frac{3}{4}x - 6$
$y = -\frac{3}{2}x + 3$

Solution: _____



3) $y = \frac{3}{2}x - 6$
$y = -4x + 5$

Solution: (2, -3)



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4) $y = 3x - 2$
$y = 3x + 4$

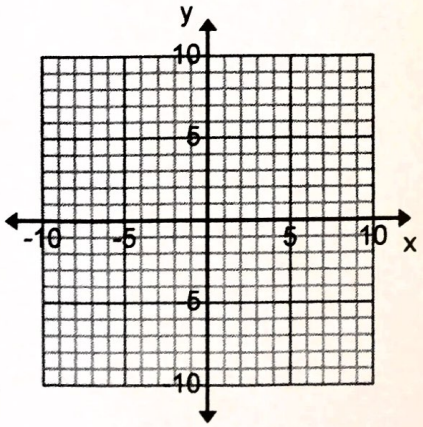
Solution: _____

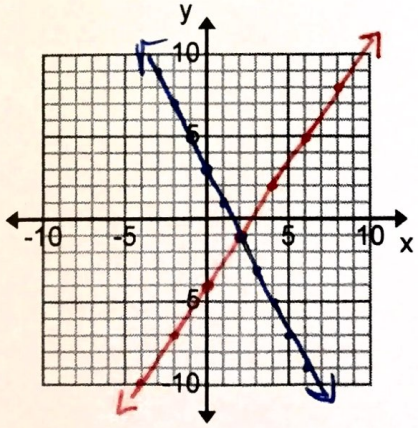
5) $3x - 2y = 8$
$y = -2x + 3$

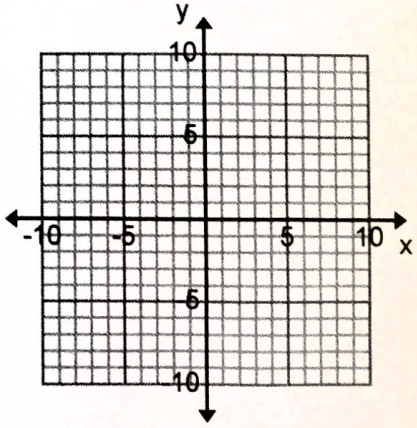
Solution: (2, -1)

6) $y = -\frac{1}{2}x + 3$
$2x + 4y = 12$

Solution: _____







7. $x - y = 2$
$x + y = 6$

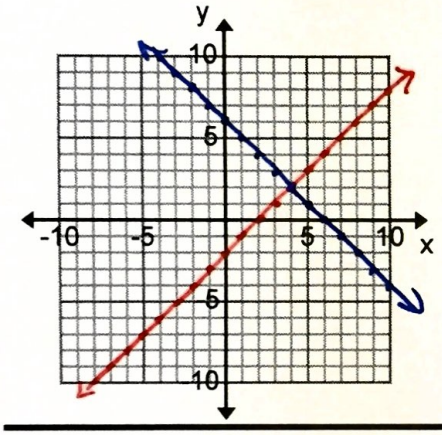
Solution: (4, 2)

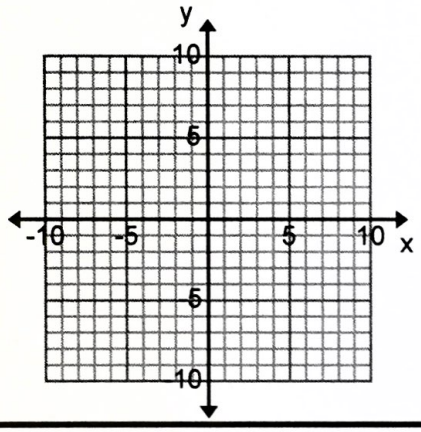
8. $x - y = 3$
$x + y = -1$

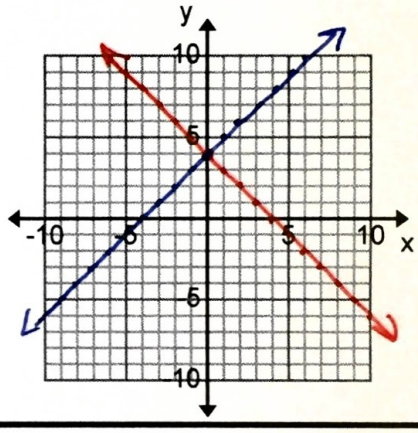
Solution: _____

9. $x + y = 4$
$y - x = 4$

Solution: (0, 4)







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10. $y = \left(\frac{1}{3}\right)^x$
$y = x + 4$

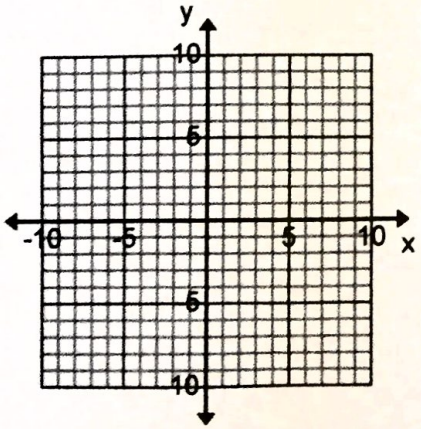
Solution: _____

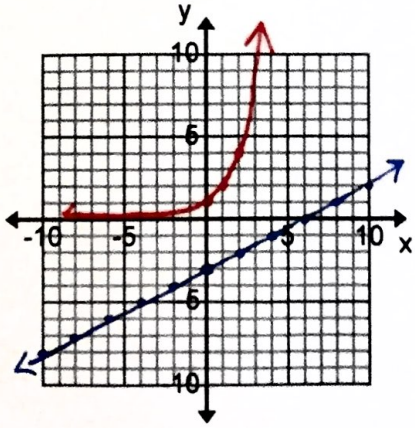
11. $y = 2^x$
$y = \frac{1}{2}x - 3$

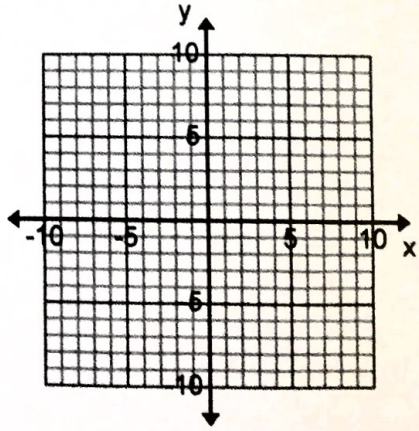
Solution: No Solution

12. $y = 8\left(\frac{1}{2}\right)^x$
$y = 3x + 1$

Solution: _____







Solve the following systems of equations using substitution. **SHOW WORK** and **STATE the SOLUTION.**

13) $\begin{cases} y = 6x - 11 \\ -2x - 3y = -7 \end{cases}$

(2, 1)

14) $\begin{cases} y = x - 1 \\ 2x - 3y = -1 \end{cases}$

15) $\begin{cases} y = -3x + 5 \\ 5x - 4y = -3 \end{cases}$

(1, 2)

16) $\begin{cases} -3x + 3y = 4 \\ -x + y = 3 \end{cases}$

17) $\begin{cases} 2x - 4y = 6 \\ x = 2y + 3 \end{cases}$

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

∞ Many

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

(-3, 5)

20) $\begin{cases} -2x - y = -9 \\ 5x - 2y = 18 \end{cases}$