

Name: _____ Period: _____

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

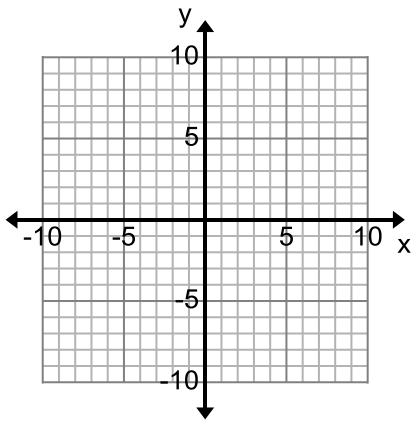
Instructions: Graph the following equations and tell the coordinates of where they intersect.

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

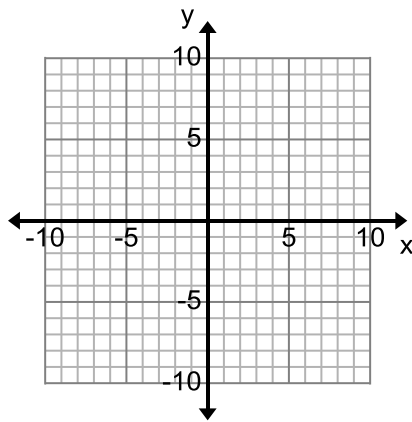
2) $y = \frac{3}{4}x - 6$
 $y = -\frac{3}{2}x + 3$

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

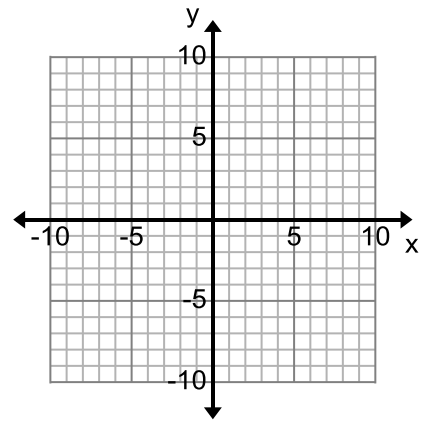
Solution: _____



Solution: _____



Solution: _____

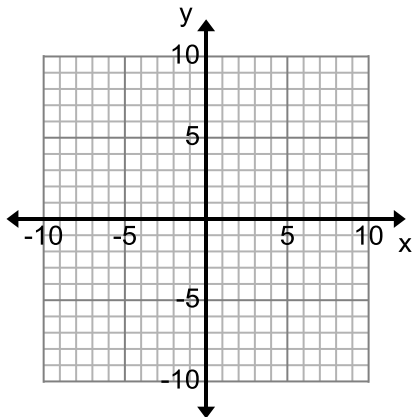


4) $y = 3x - 2$
 $y = 3x + 4$

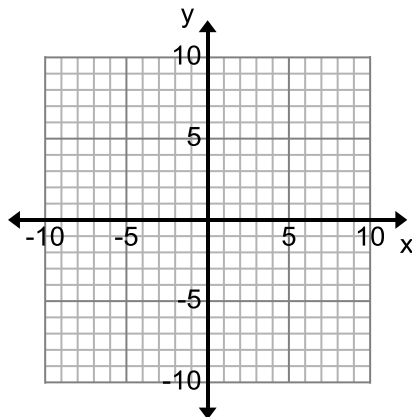
5) $3x - 2y = 8$
 $y = -2x + 3$

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

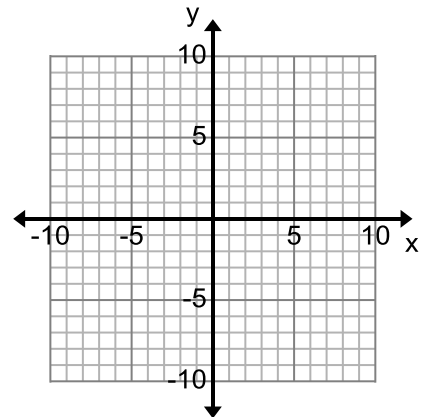
Solution: _____



Solution: _____



Solution: _____



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

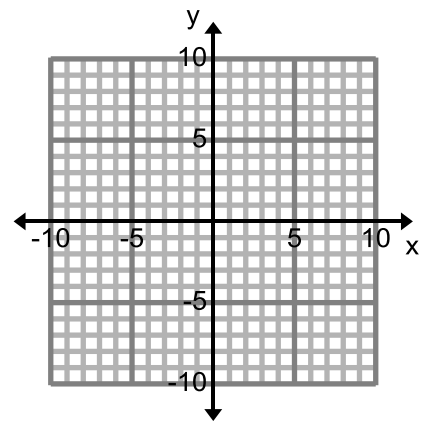
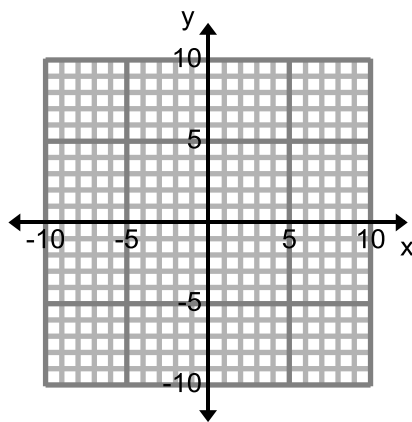
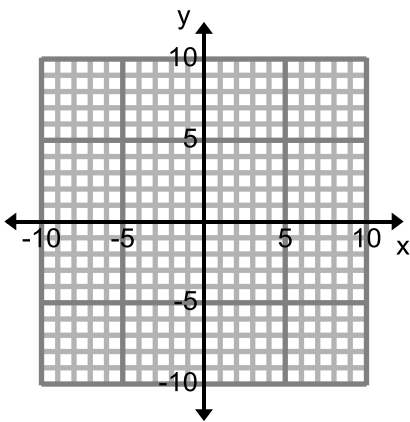
Solution: _____

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

Solution: _____

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

Solution: _____



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

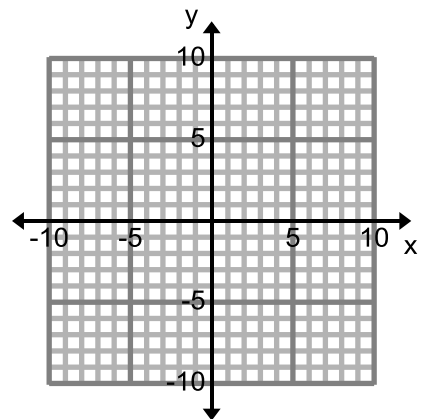
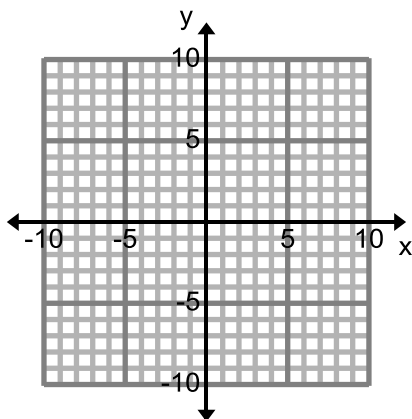
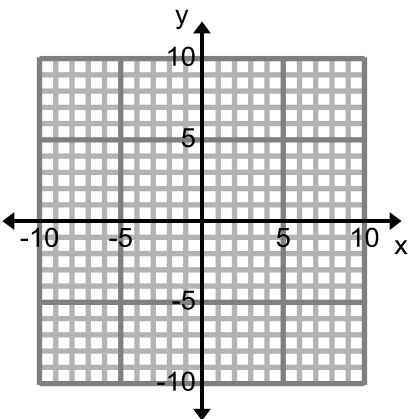
Solution: _____

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

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**.

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

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

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

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

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

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

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

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