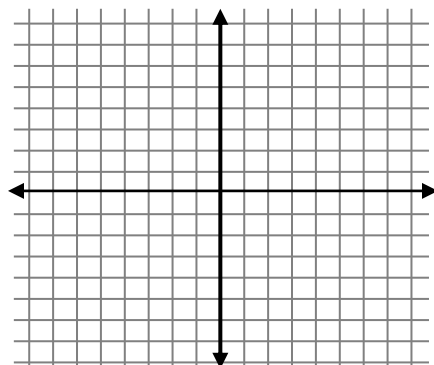


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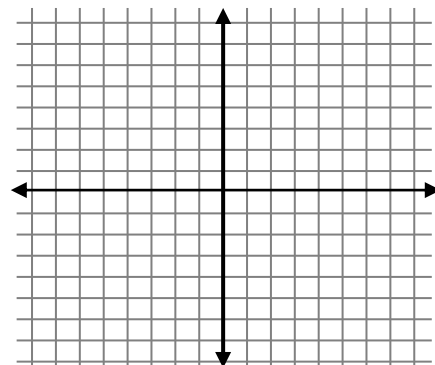
Solve each system by Graphing:

1. $x - 2y = 4$
 $y = \frac{1}{2}x + 4$



Answer: _____

2. $y = x - 1$
 $2x + 3y = 12$



Answer: _____

Solve each system by Substitution:

3. $y = 2x + 10$
 $y = -2x - 6$

4. $4x + y = -3$
 $y = 6x + 17$

5. $x + 4y = 16$
 $y = -2x - 3$

Solve each system by Elimination:

6. $2x + 5y = -24$
 $3x - 5y = 14$

7. $6x + 9y = 3$
 $-4x - 6y = 5$

8. $2x + 3y = 12$
 $5x - y = 13$

Solve each system using the method that you think is best:

9. $-3x + 4y = 10$

$x = 2y - 6$

10. $3x + 2y = -5$

$5x + 3y = -6$

Solve each problem by setting up a system of equations and solving the system:

11. A water tank currently has 130 gallons of water and is being filled by 10 gallons every hour. A second water tank currently has 280 gallons of water and is being drained by 5 gallons every hour. After how many hours will the two tanks have the same amount of water? Show your equations.

12. A school is planning field trip for 296 people. Buses can carry 40 people and vans can carry 12 people. The number of vans being used is 3 more than the number of buses. How many vans are being used for the trip. Show your equations.

13. Mrs. Gonzalez bought candles and vases as centerpieces to put on each table at a graduation party. She spent a total of \$31.50. There are 8 table that require a centerpiece. Candles cost \$3 each and vases cost \$4.25 each. How many of each did she buy. Show your equations.

14. An artist plan on selling two sizes of prints at the fair. If she sells 10 large prints and 3 small prints, then she will make \$147. If she sells 6 large prints and 4 small prints, then she will make \$108. How much is she charging for each size of print? Show your equations.

15. Given the inequality $y \leq -3x + 4$

Determine if each of the following points is a solution to the inequality. (yes or no)

a. (2, -5) _____

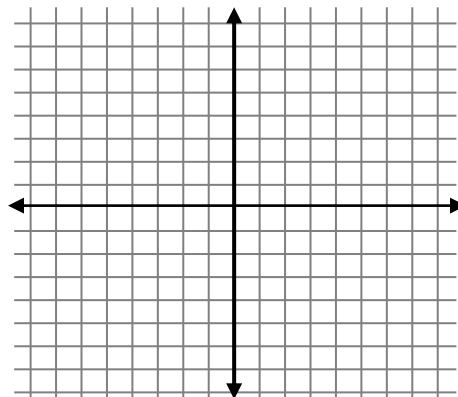
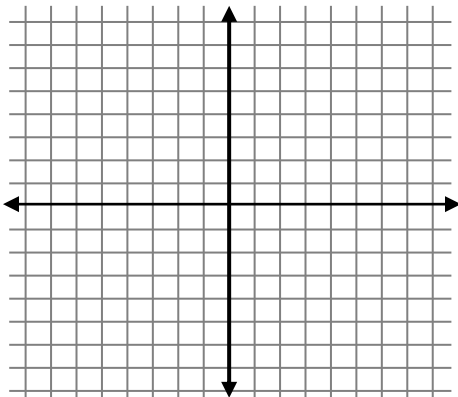
b. (-4, 16) _____

c. (-1, -2) _____

Graph and shade the solution to each inequality:

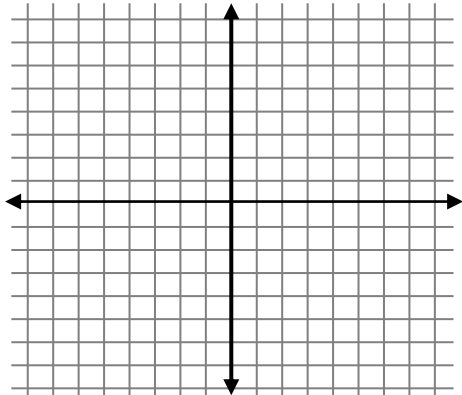
16. $y > \frac{-3}{2}x + 6$

17. $4x - 2y \geq 12$

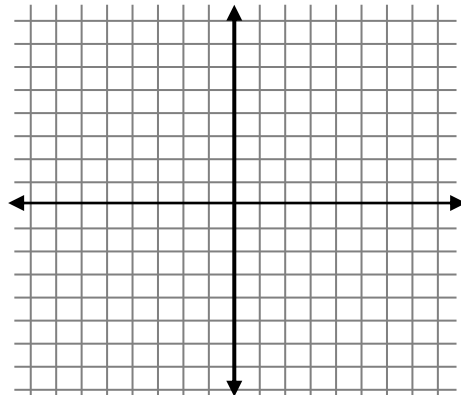


Graph and shade the solution to each system of inequalities:

18. $y < -2x + 3$
 $3x - 4y \leq 12$



19. $x - y \leq 4$
 $y \leq -2x + 7$
 $x > 1$



20. You have \$300 for wooden planks for your outdoor deck. Cedar costs \$2.50 per foot and pine costs \$1.50 per foot.
- Write an inequality for how many feet of each type of wood you can buy if you spend no more than your budget of \$300.
 - What is the maximum number feet of cedar you can buy if you choose to not use any pine?