

Today's Plan:

Learning Target (standard): I will review for the semester exam.

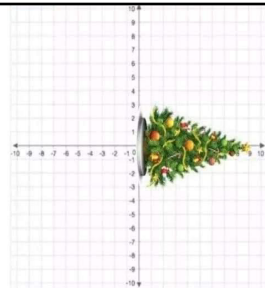
Students will: Complete practice problems over previous concepts at the boards and study for my exam.

Teacher will: Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide examples of exam problems.

Assessment: Board work

Differentiation: Students will work at the board, actively engage in practice review concepts with the aid of other students and the teacher.

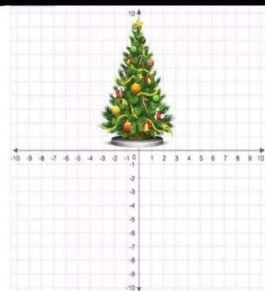
X-mas tree



And "coordinating"
wrapping paper is a plus!



Y-mas tree



NAME _____

#76

BELL RINGER

1.) Find the y-intercept of the equation $x + 3y = 4$.

$I_y: (0, \frac{4}{3})$

$3y = -x + 4$
 $0 + 3y = 4$
 $3y = 4$
 $y = \frac{4}{3}$

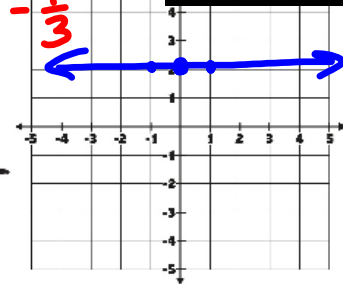
2.) Solve the equation $2(x - 1) = -3x + 4$.

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

3.) Graph the line $y = 2$.

$m = 0$
 $I_y: (0, 2)$

x	y
-1	2
0	2
1	2



The county fair is a popular field trip destination. This year the senior class at High School A and senior class at High School B both planned trips there. The senior class at High School A rented filled 3 vans and 12 buses with 411 students. High School B rented and filled 14 vans and 6 buses with 318 students. Every van had the same number of students in it as did the buses. Find the number of students in each van and in each bus.

① $x = \# \text{ of students in a van}$
 $y = \# \text{ of students in a bus}$

② $3x + 12y = 411$
 $(14x + 6y = 318) \cdot 2$

③ $3x + 12y = 411$
 $-28x - 12y = -636$

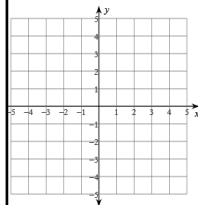
$27 + 12y = 411$
 $12y = 384$
 $y = 32$

$-25x = -225$
 $x = 9$

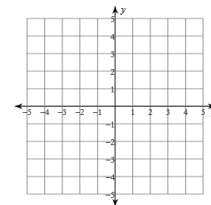
∴ Each van held 9 students & every bus held 32 students.

Sketch the solution to each system of inequalities.

36) $x + 2y < -2$
 $2x + y \geq 2$

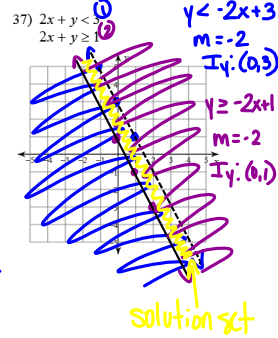
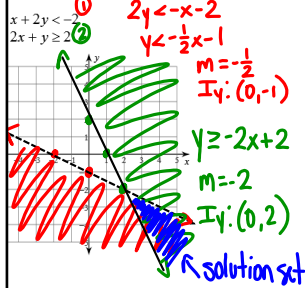


37) $2x + y < 3$
 $2x + y \geq 1$



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Graph the solution to each system of inequalities.

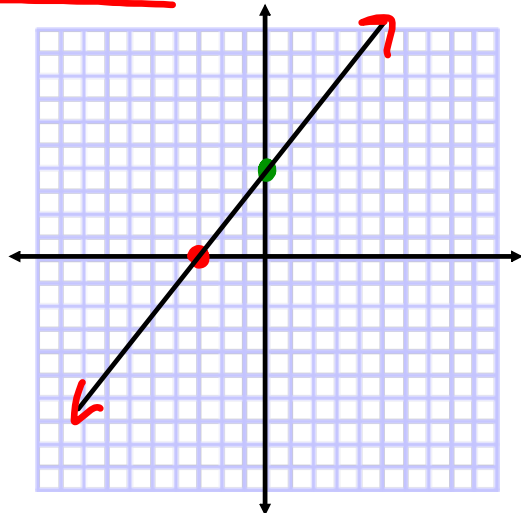


Graph using the intercept method.

$$4x - 3y = -12$$

$$I_x: (-3, 0) \quad \begin{array}{l} 4x = -12 \\ x = -3 \end{array}$$

$$I_y: (0, 4) \quad \begin{array}{l} -3y = -12 \\ y = 4 \end{array}$$

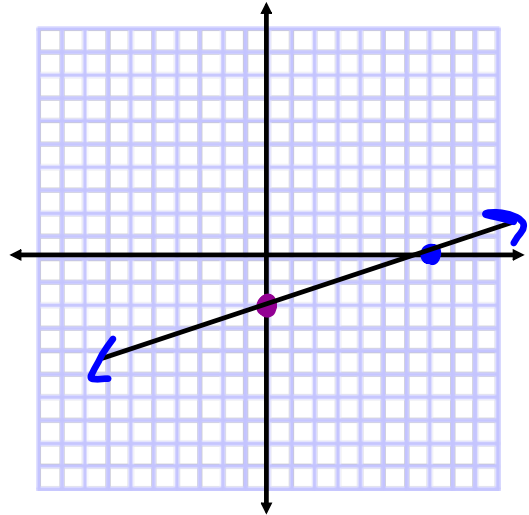


Graph using the intercept method.

$$-2x + 7y = -14$$

$$I_x: (7, 0) \quad \begin{array}{l} -2x = -14 \\ x = 7 \end{array}$$

$$I_y: (0, -2) \quad \begin{array}{l} 7y = -14 \\ y = -2 \end{array}$$



Write the equation of the line in standard form.

$$\text{thru } (-2, 3) \\ m_{||} = \frac{2}{3}$$

$$y = mx + b$$

$$3 = \frac{2}{3}(-2) + b$$

$$3 \left[3 = -\frac{4}{3} + b \right]$$

$$9 = -4 + 3b$$

$$13 = 3b$$

$$b = \frac{13}{3}$$

parallel to

~~$$2x - 3y = 6$$~~

~~$$-3y = -2x + 6$$~~

~~$$y = \frac{2}{3}x - 2$$~~

~~$$m = \frac{2}{3}$$~~

$$y = \frac{2}{3}x + \frac{13}{3}$$

$$-3 \left[-\frac{2}{3}x + y = \frac{13}{3} \right]$$

$$2x - 3y = -13$$