Warm-Up

Visit https://tinyurl.com/y922jmpc and spend about 15 minutes reviewing what we learned yesterday.

Please follow the prompts on each slide (complete the warm-up, etc.)

Return Things

Unit 6 Test - Great job!! → Test corrections are due Friday. Access the test tinyurl.com/y88kqysx

If you were absent for the Unit 7 Test, you <u>need</u> to schedule a day to take it.

Systems of Linear Inequalities

12/12/2018

The solution to a system of inequalities is the overlapping shaded regions

To find the overlapping shaded region:

1. Solve both equations for y
2. Find x and y intercepts, and graph using those
3. Show dotted and solid lines
4. Shade each inequality in the proper direction
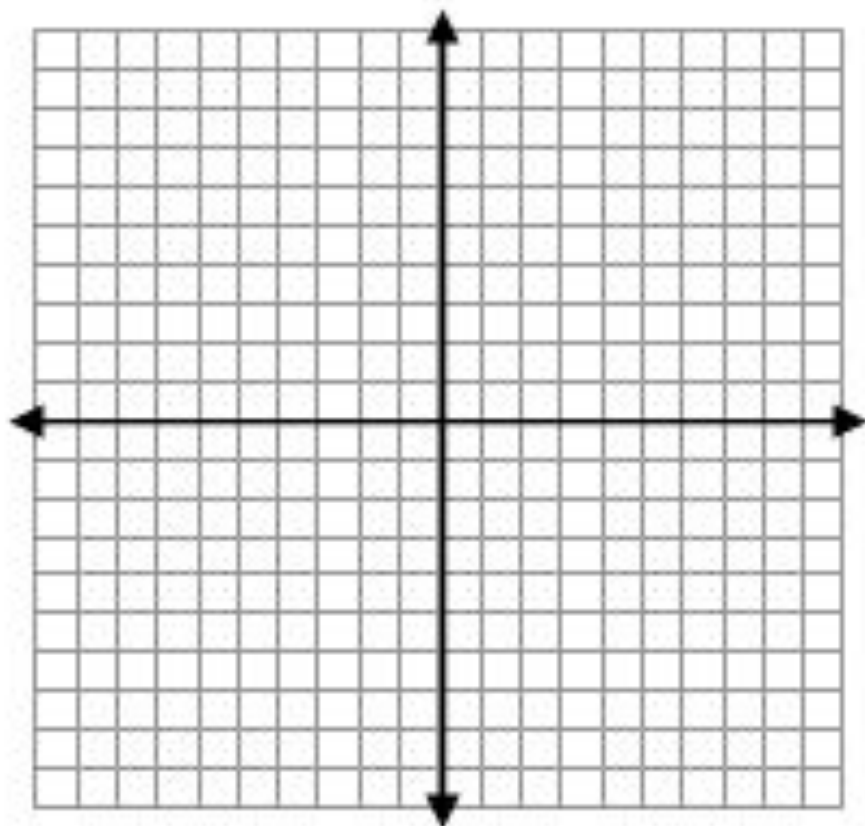5. Shade the overlapping region (the solution set) darker!

When you have graphed your system of inequalities, you have two possible outcomes:

1. Intersecting regions: overlapping shaded region is the solution
2. Separate regions: No solution exists
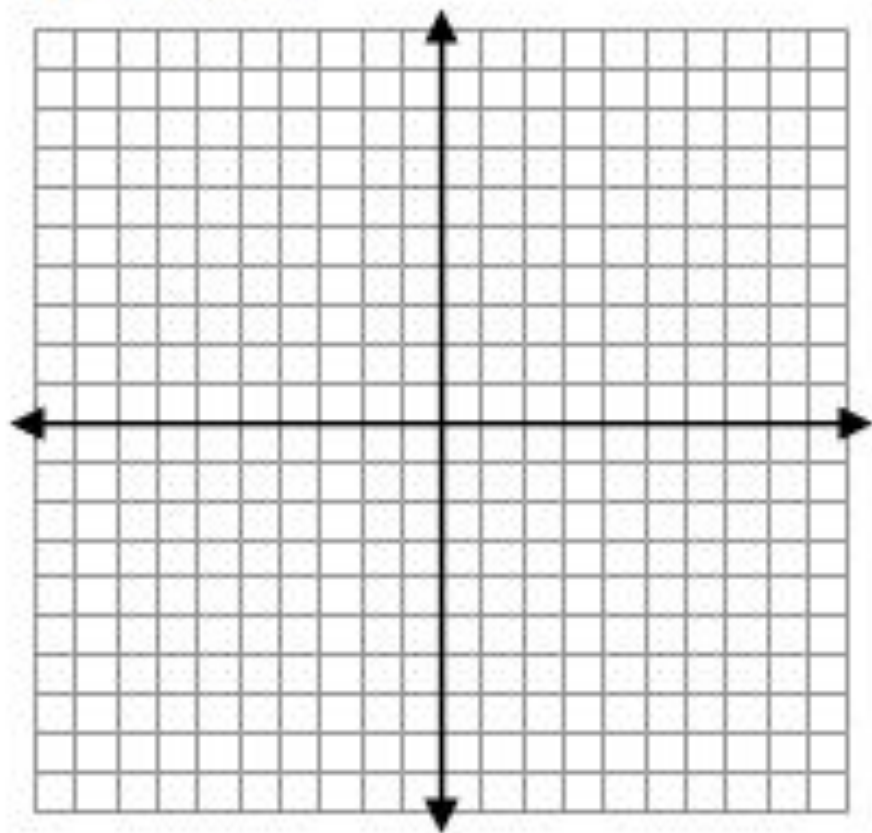
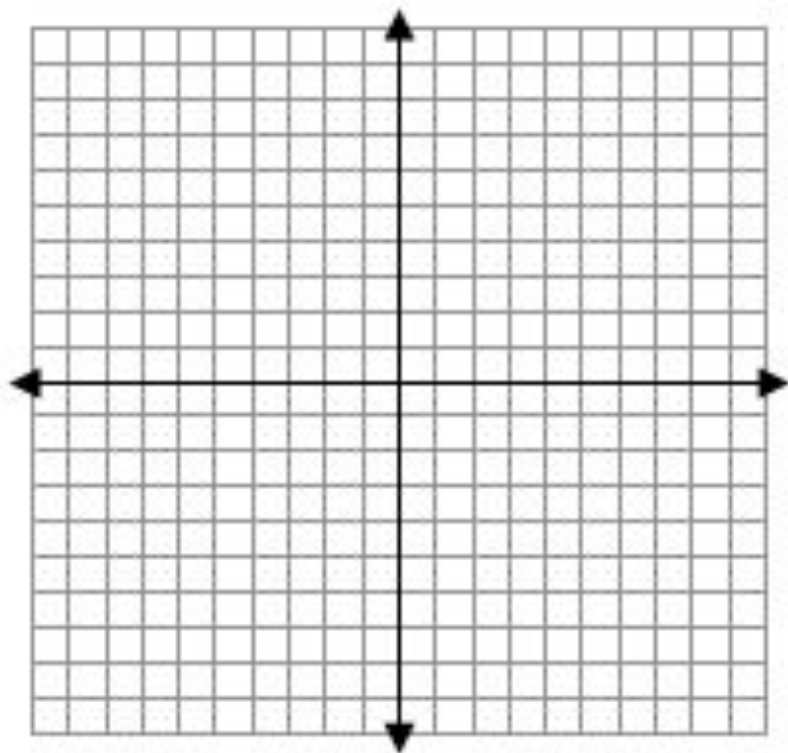**Example 1:** $x \geq 2$

$y > 3$

Example 2:
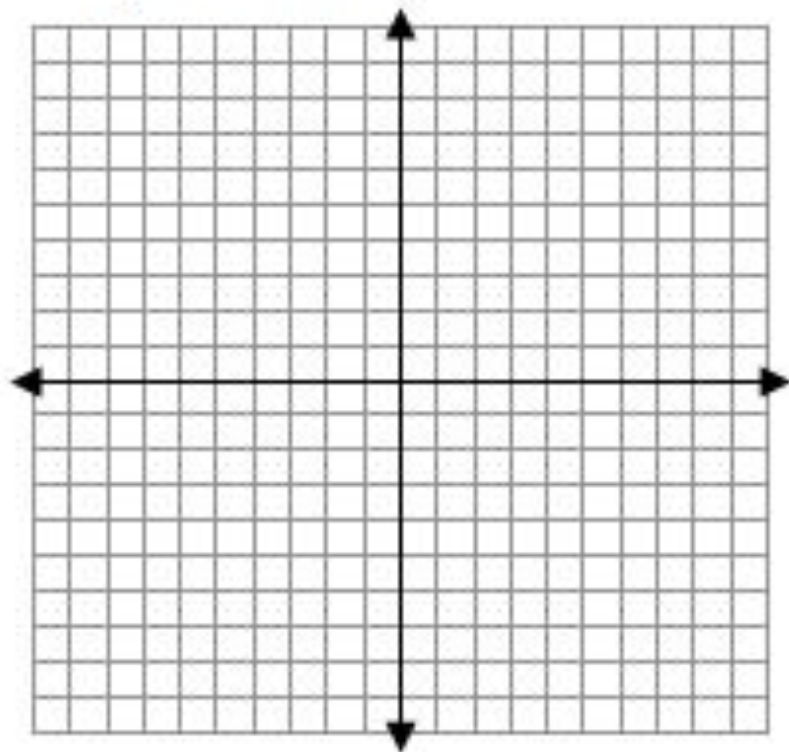$$y < 2 - x$$
$$y > x + 4$$

Example 3: $4x - 3y < 7$
$2y - x < -6$

Example 4:

$$y < -\frac{1}{3}x + 1$$

$$-3y < x - 6$$

Example 5:
$$y \leq -\frac{4}{3}x$$
$$y \geq -x$$
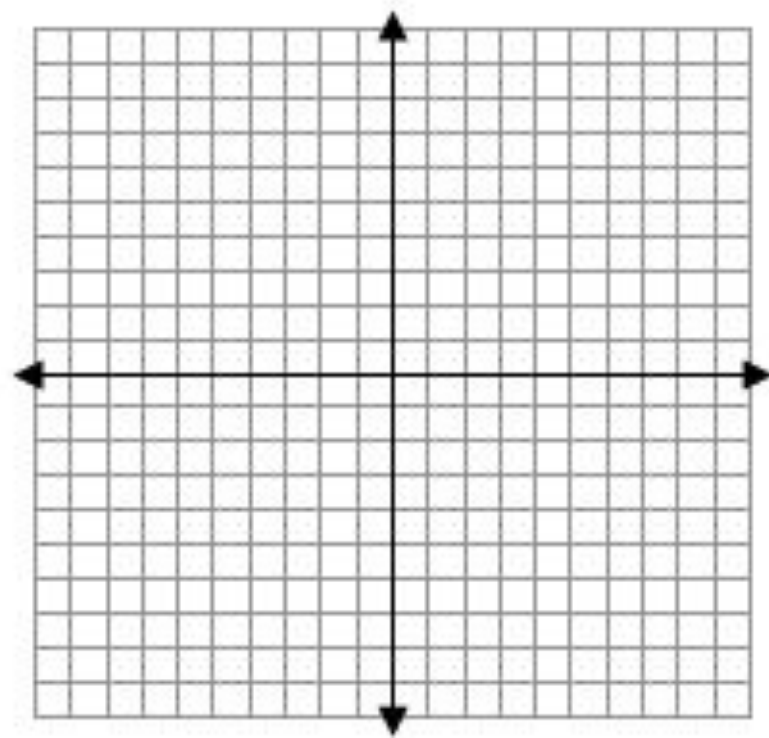
Example 6: $-x < 4 - y$

$y \geq x - 6$

Practice

First - https://tinyurl.com/npvrx43

Second - https://tinyurl.com/jlsojea
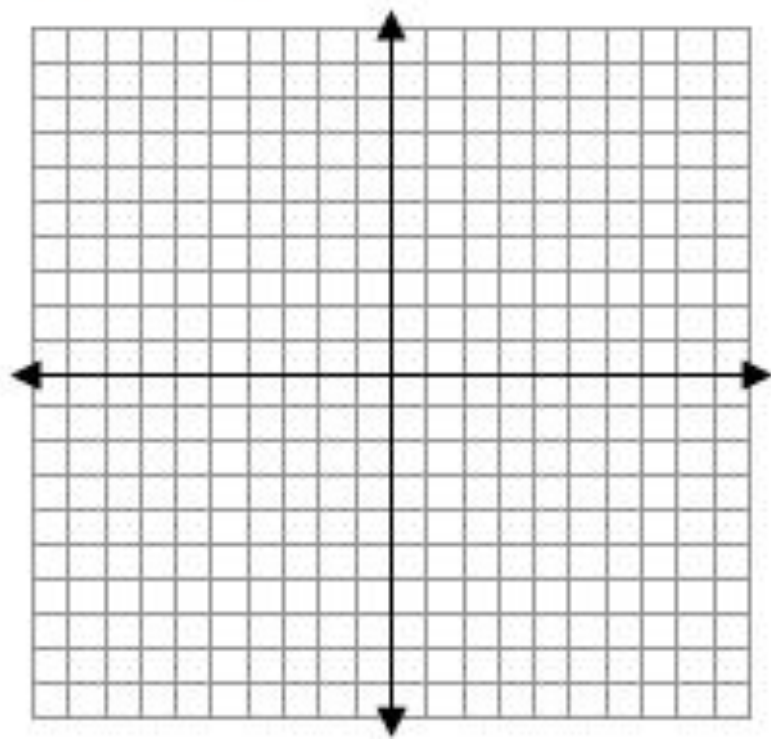
Last - Ask Ms. Barger about the homework

Tonight for homework

You have a worksheet to complete. It's posted on my website, but would be easier to complete if you actually print the worksheet (so you have a grid to graph on). If you finish the lesson early, you may ask to have your agenda signed and go print the worksheet in the media center.

For extra practice at home, check out
https://tinyurl.com/ns27kdk