TRS 92: Graphing Inequalities with Two Variables

Steps to graphing linear inequalities:

Step 1: find the intercepts of the function **OR** write in slope-intercept form

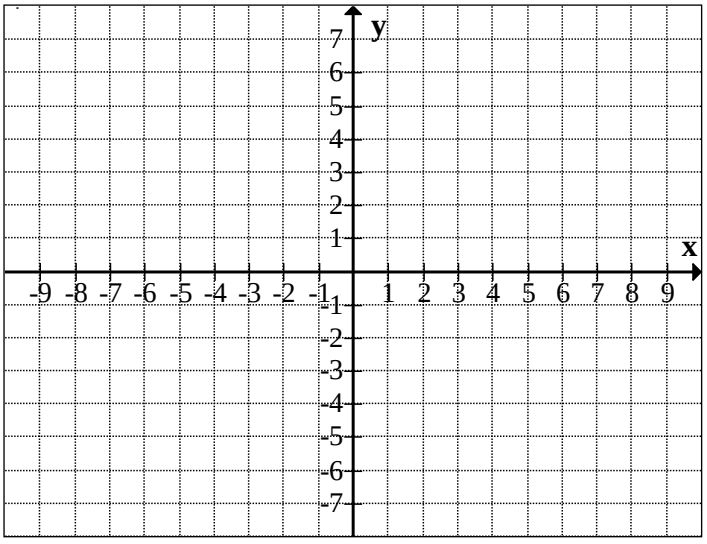
Step 2: graph the boundary line

- If < or > use dotted line. If $\leq$ or $\geq$ use solid line.

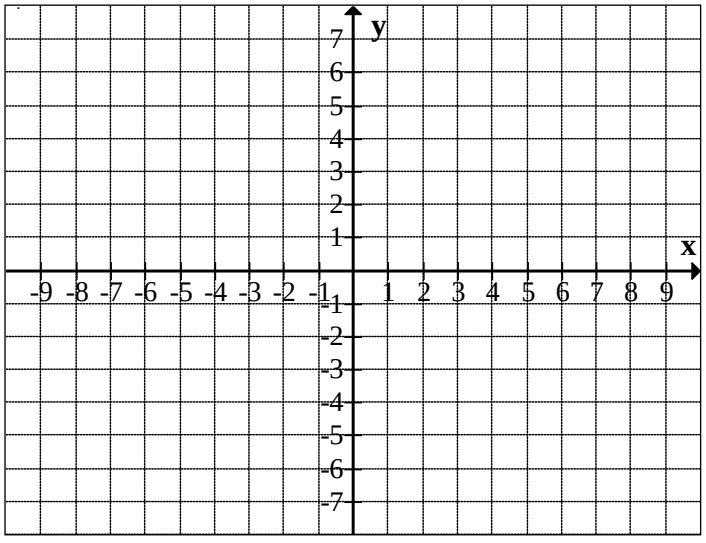
Step 3: shade the area of inequality

- Pick a point not on the line.
- Substitute this point into the inequality.
  - If inequality is true, shade on the side of line that includes that point.
  - If inequality is not true, shade on the side of line not including that point.

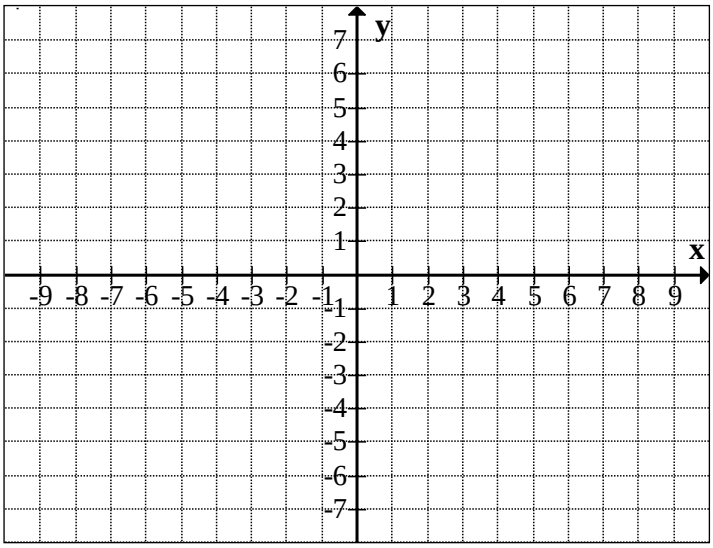
1. $y \geq 2x - 1$



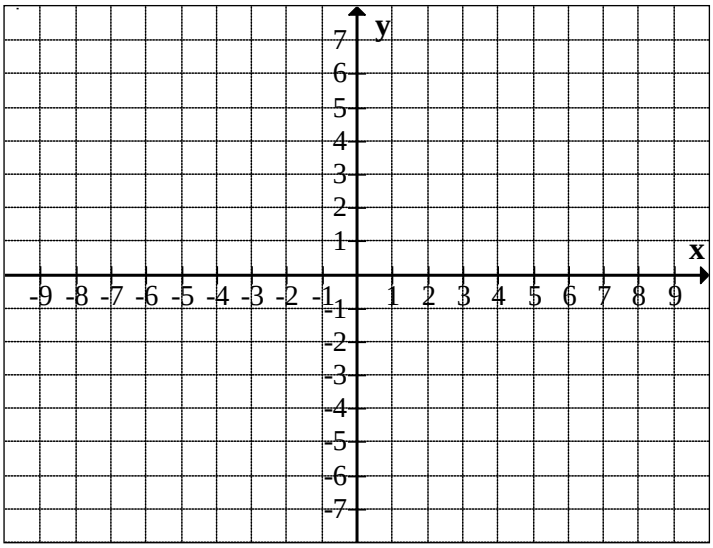
2. $2x - 4y < 6$



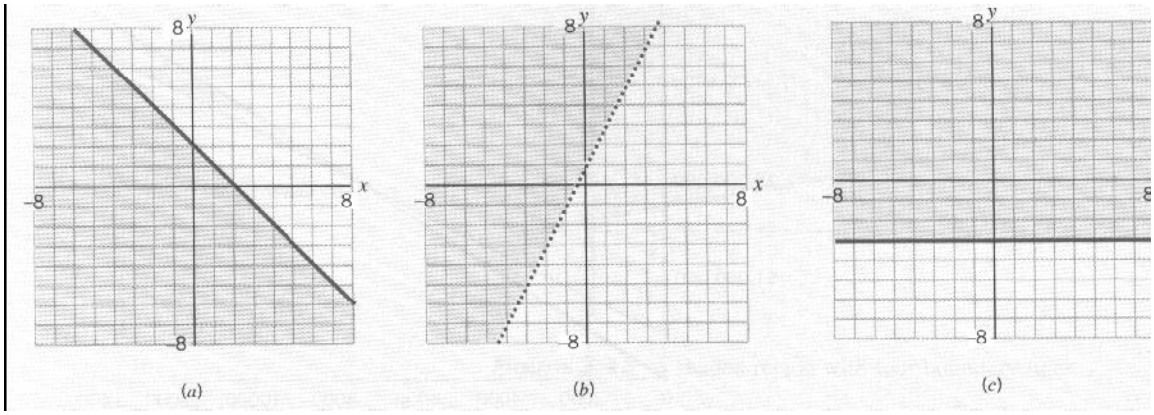
3. $2x + y \leq 8$



4. $x - 3y > 4$



5. Determine the inequality that has the given graph in the figure below.



TRS 92: Solving the Capstone Question

Based on current population growth, how long will it take for the population to reach the point at which there is 1 square meter of land for each person?

In order to answer this question, you will need to use the knowledge you have gained during the semester as well as several class documents.

You need: Day 3 HW #19
Day 4 Activity #5
Day 34 HW #1