## 7.6 Solve Systems of Linear Inequalities by Graphing

Review of solving inequalities by graphing, like y > 2x - 5 or  $3x - 2y \ge 2$ 

1.) Solve the inequality of y, if needed

a. REMEMBER!!! When you divide both sides by a negative, the inequality sign FLIPS!

2.) Graph the inequality the SAME way you'd graph a line, pretending the inequality sign is an = sign

- a. If the inequality sign is > or < then the line will be a DASHED line
- b. If the inequality sign is  $\leq or \geq$  then the line will be a SOLID line
- 3.) Pick ANY random point that IS NOT a point on the line, and plug it into the inequality
  - a. If the statement ends up being TRUE, shade the entire side of the line that INCLUDES that point
  - b. If the statement ends up being FALSE, shade the entire side of the line that DOES NOT INCLUDE that point

Ex 1) solve/graph

Include at least 3 points when graphing.



How to Solve Systems of Inequalities:

Ex 2) Solve the system of inequalities by graphing



Ex 3) Solve the system of inequalities by graphing



Ex 4) Solve the system of inequalities by graphing



Ex 5) Solve the system of inequalities by graphing

