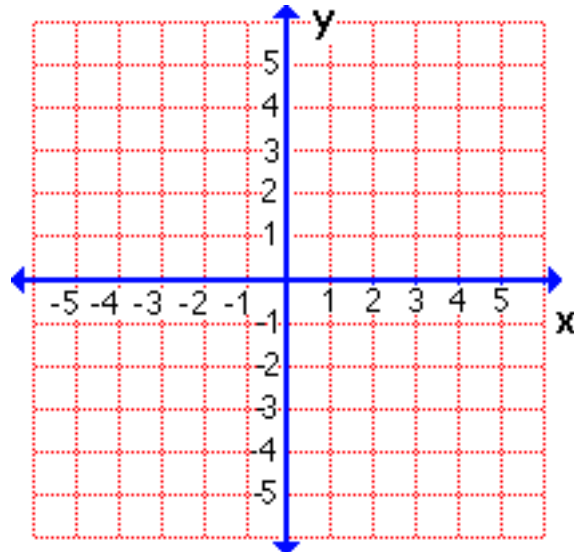


Name _____

Date _____ Pd. _____

Notes: Graphing Linear Inequalities Day 1

Graph Linear Inequalities The _____ set of an inequality that involves two variables is graphed by graphing a related linear equation that forms a boundary of a _____. The graph of the ordered pairs that make up the solution set of the inequality fill a region of the coordinate plane on one side of the _____.

*Example***Graph $y \leq -3x - 2$.**

Name _____

Date _____ Pd. _____

Exit Card: Graphing Linear Inequalities Day 1

Julio sells bags of popcorn and peanuts. Popcorn sells for \$2 a bag, and peanuts for \$3 a bag. He would like to make more than \$50 in sales today. Which of these inequalities represents this situation if x represents the number of popcorn bags sold, and y represents the number of peanut bags sold?

- A. $2x - 3y > 50$ B. $2x + 3y > 50$ C. $2x - 3y < 50$ D. $2x + 3y < 50$
-

In a game, you gain 4 points for each correct answer, and lose 1 point for each incorrect answer. If George answers r questions correctly and w questions incorrectly, which inequality must be true for George to have a positive score?

- A. $4r + w < 0$ B. $4r - w < 0$ C. $4r - w > 0$ D. $r + 4w > 0$
-

Which ordered pair is **not** a solution to the inequality $3x + 2y \leq 12$?

- A. $(-1, 6)$ B. $(3, 0)$ C. $(2, 2)$ D. $(-2, 10)$

Name _____

Date _____ Pd. _____

Homework: Page 355 (3 – 6)

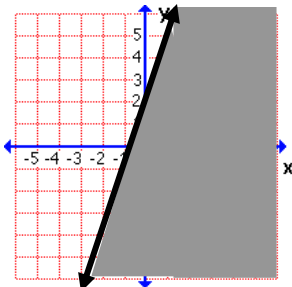
3. Explain why it is usually only necessary to test one point when graphing an inequality.

4. Determine which ordered pairs are part of the solution set of $y \leq x + 1$
 $\{ (-1, 0), (3, 2), (2, 5), (-2, 1) \}$

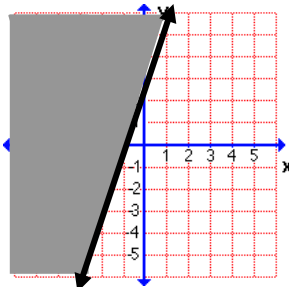
5. Determine which ordered pairs are part of the solution set of $y > 2x$
 $\{ (2, 6), (0, -1), (3, 5), (-1, -2) \}$

6. Which graph represents $y - 2x \geq 2$?

A



B



C

