Lesson 2.2 Practice: Systems of Linear Inequalities

School Launch · Algebra II · Unit 2: Linear Systems and Linear Programming · Worksheet A

Calculator for decimals

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Which of the points $(-3, 5)$, $(-2, -1)$ are solutions of $y < -3x + 2$? Is the boundary line solid or dashed? EASY

2. Which of the points $(2, 3)$, $(-5, 2)$ are solutions of $y \geq 3x + 1$? Is the boundary line solid or dashed? EASY

3. Which of the points $(2, 1)$, $(4, 3)$ are solutions of $y < -3x + 2$? Is the boundary line solid or dashed? EASY

4. Which of the points $(-1, 5)$, $(3, 4)$, $(-2, -1)$ are solutions of $y \leq 4x - 3$? Is the boundary line solid or dashed? MEDIUM

5. Which of the points $(0, 1)$, $(-5, -5)$, $(-5, -5)$ are solutions of $y > 3x - 2$? Is the boundary line solid or dashed? MEDIUM

6. Which of the points $(0, -5)$, $(5, 1)$, $(-2, 4)$ are solutions of $y \leq 1x + 1$? Is the boundary line solid or dashed? MEDIUM

7. Which of the points $(-4, -5)$, $(-4, 0)$, $(3, 1)$ are solutions of $y \geq 1x - 5$? Is the boundary line solid or dashed? MEDIUM

8. Which of the points $(-4, 4)$, $(4, -1)$, $(1, -2)$, $(-3, 2)$ are solutions of $y > 4x + 5$? Is the boundary line solid or dashed? HARD

9. Which of the points $(0, -1)$, $(-3, 2)$, $(-2, -5)$, $(-5, 5)$ are solutions of $y \geq -3x - 3$? Is the boundary line solid or dashed? HARD

10. Which of the points $(-3, -5)$, $(1, 0)$, $(3, 5)$, $(-5, 1)$ are solutions of $y \geq -2x + 4$? Is the boundary line solid or dashed? HARD