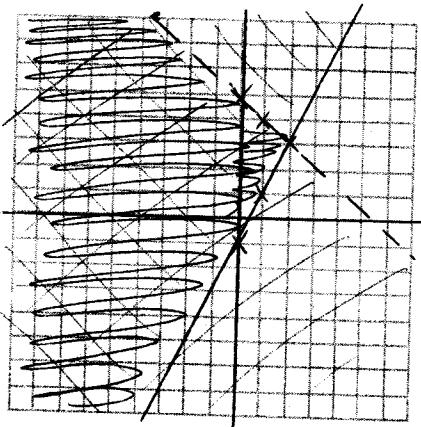


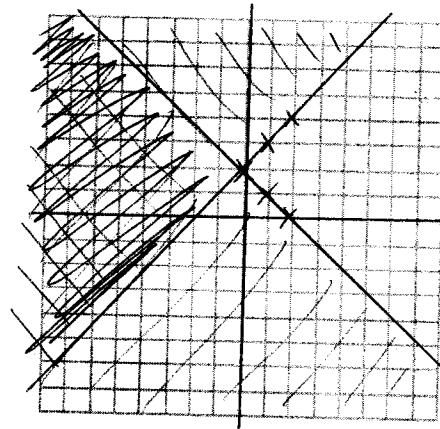
Lesson 5: The Solution of a System of Linear Inequalities Part I

The solution to a system of linear inequalities is the area that is satisfied by all constraints. This is the area that is shaded by all constraints. Find the solution to the following systems of inequalities:

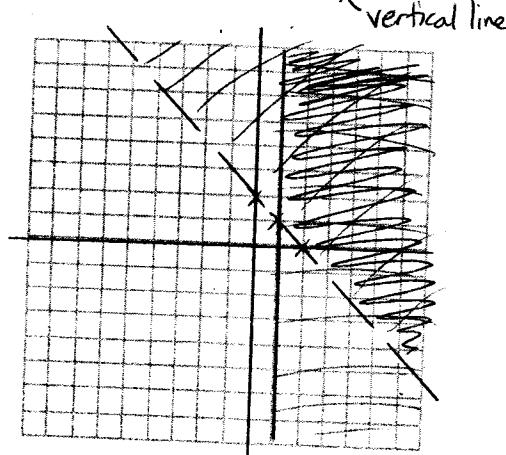
$$1) \quad y \geq 2x - 1 \\ y < -x + 5$$



$$2) \quad y \geq x + 2 \\ y \leq -x + 2$$



$$3) \quad x + y > 2 \quad y > -x + 2 \\ 2x + 2 \geq 4 \quad 2x \geq 2 \quad x \geq 1$$



$$4) \quad x - y + 1 > 0 \quad -y > -x - 1 \quad y < x + 1 \\ 2x + 3y + 6 \geq 0 \quad 3y \geq -2x - 6 \quad y \geq \frac{-2}{3}x - 2$$

