

NAME: _____

1. Describe the type of problems that linear programming can solve.
2. Make up a linear programming situation and write inequalities for each restriction you name.
3. Write a system of restrictions that form a square region.

- If there are two variables and several different restrictions on those variables, then linear programming
- [1] lets you find the values of the variables that will give you a maximum or minimum function.

Answers may vary. Sample: You need 12 pounds of meat. Beef costs \$1.50 per pound and the pork costs \$2.25 per pound. You need at least 3 lb of beef and 2 lb of pork and have only \$25.

- [2] $b \geq 3, p \geq 2, 1.5b + 2.25p \leq 25$

- [3] Answers may vary. Sample: $x \geq 1, y \geq 1, x \leq 3, y \leq 3$