Algebra 2 – 3.4 Linear Programming Name_____

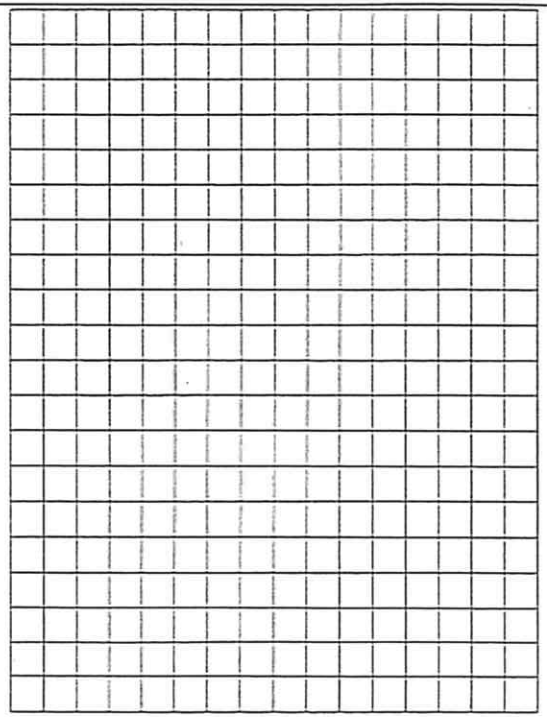
Steps for solving a linear programming problem.

1. Read the whole problem.
2. Define your unknown.
3. Organize data in a table.
4. Express the objective function and constraints.
5. Graph the constraints.
6. Find the corner points (vertices) to the feasible region.
7. Evaluate the objective function at all the feasible corner points
8. Write your answer(s) – does it make sense?

Gold Rush

A gold processor has 2 sources of gold ore, source A and source B.
At least 3 tons of ore must be processed each day.
Ore from source A costs $20 per ton to process, and ore from source B cost $10 per ton to process.
Costs must be kept to less than $80 per day.
The amount of ore from source B cannot exceed twice the amount of ore from source A.
Source A yields 2 oz. of gold per ton, and ore from source B yields 3 oz. of gold per ton.
How many tons of ore from both sources must be processed each day to maximize the amount of gold extracted.

Organize information in a table:



Objective Function

	x	y	

Answer: