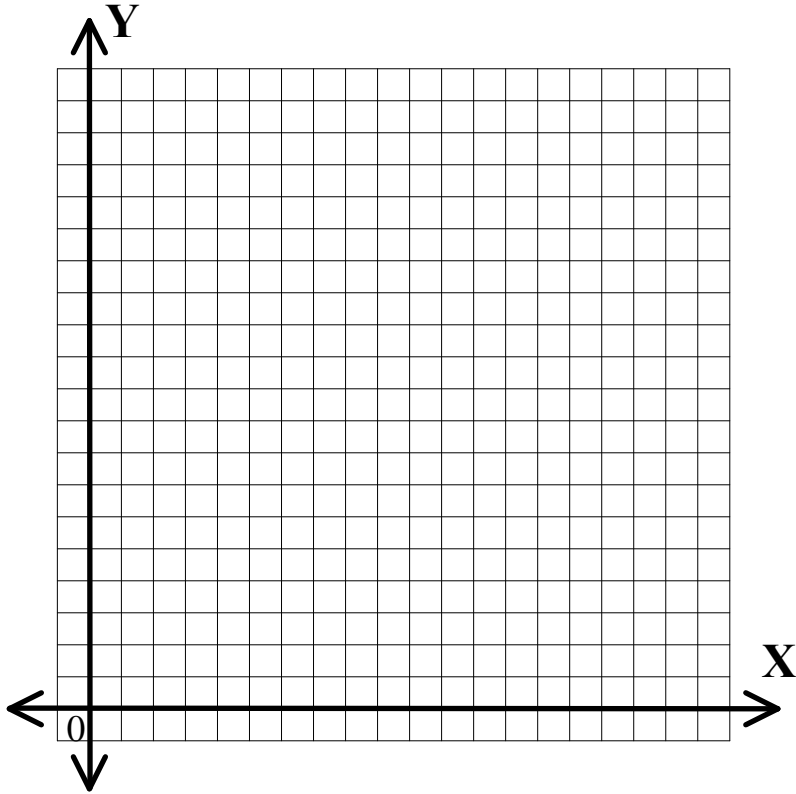


Algebra II Worksheet #5 Unit 4 page 1 _____

Solve the following linear programming problem. Show all of your work neatly organized.

1. A company sells two types of canned dog food. Type A uses one pound of meat and two pounds of cereal per can. Type B uses two pounds of meat and one pound of cereal per can. They have 1000 pounds of meat and 1400 pounds of cereal available. Each can of type A dog food will sell for \$2. Each can of type B dog food will sell for \$3. How many cans of each type should they make to maximize their total revenue?



Algebra II Worksheet #5 Unit 4 page 2

Solve the following linear programming problem. Show all of your work neatly organized.

2. A company manufactures two types of lawn edgers, one of which is cordless. The 'cord' edger requires a total of two hours of labor to make. The 'cordless' edger requires a total of four hours of labor to make. The company has a total of 800 hours of labor available for manufacturing per day. The packing department can pack and ship a total of 300 edgers per day. If the profit on each 'cord' edger is \$15, and the profit on each 'cordless' edger is \$18, then how many edgers of each type should the produce per day in order to maximize their profit?

