Hon Alg 2 Classwork Inequalities Fall 2016 Name

For 1 to 6 write an inequality to model each statement.

1. The elevator can hold up to 2300 pounds.

2. The wheelbarrow can carry no more than 40 bricks.

3. The employee needs at least 40 hours of work this week.

4. The farmer is going to plant some corn.

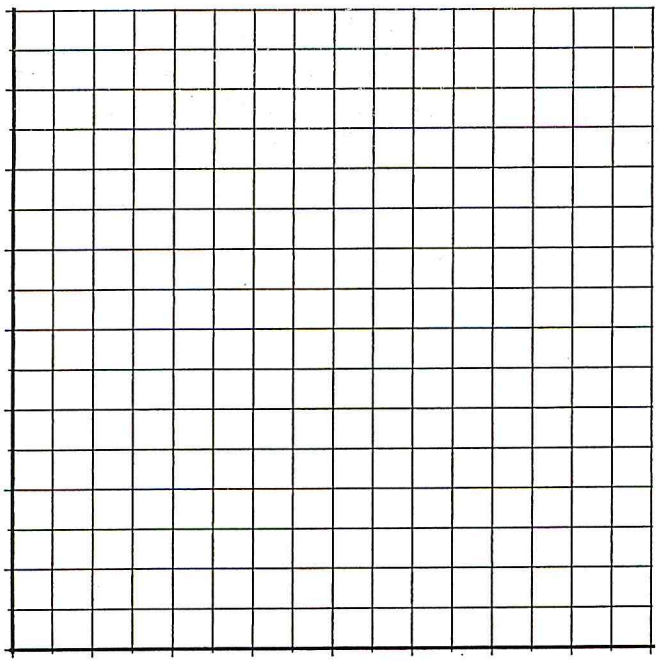
5. The rancher raises cows and goats. The can raise no more than 250 animals.

6. It costs $40 to produce a chair and $75 to produce a table. The budget for chairs and tables is $2000.

7. Basketballs cost $9 each and footballs cost $24 each.
You can spend no more than $144 on balls for the two teams.
You only have enough room on the equipment cart for 11 more balls.

a) Write a system of **four** inequalities to represent the constraints given.

b) Using the graph below, graph this system of inequalities. Shade the solution region (feasible region) with a highlighter or colored pencil.



c) State the coordinates of all four corners of the solution region (feasible region).

8. If your players autograph the balls and you sell them you can get $15 for each basketball and $40 for each football. Write an equation that models the amount of money you can make by selling these balls.