Unit 4 Culminating Task: You’re The Boss!

 Name(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date Due: Thurs. 11/16

Congrats! You have decided to start up your own company! This requires a lot of responsibility, including the financial “know-how” to keep it successful. As part of this task, you are going to outline the wages of yourself and two of your employees. You will incorporate the key concepts of Unit 4: equations and inequalities! **Your final presentation can be done as a PowerPoint, Prezi, video, booklet, poster, brochure, etc. Be sure to include ALL information below. You may work independently, with a partner, or in groups of 3 (no more than 3).**

Part I: Business Planning (60 points):

A. What is the name of your company? Give a brief description of your company. Be creative and have fun with this!

B. Now, describe your job AND the jobs of two of your employees (THREE jobs total). For each job, include:

a. Job title

b. Brief description of the job (what does the employee have to do?)

c. Hourly rate of pay

d. The equation that relates x (hours worked) and y (total pay)

e. A table of (x,y) values to reflect how much money is earned after working 0, 1, 8, 20, and 40 hours (x).

f. Determine the weekly, monthly, and yearly income for each. (40 hours per week; 170 hours per month;

 and 2040 hours per year… substitute these for x)

C. Graph your equations of all 3 jobs. Plot all three lines on the same graph so they are easy to compare!

 *\*IF you are working in a pair, you must include 6 jobs. If you are working in a group of 3, include 9 jobs.*

Part II: Getting Started (10 points):

Make a want-ad to lure in prospective employees. You may make two separate ads, or you may choose to make one ad that lists both positions.

Part III: It’s Your Business, Do Your Thing! (15 points)

Write 3 different inequalities that relate to your business. Each must include…

1. …a variable, and explain what the variable represents. Use 3 different inequality symbols.
2. Graph each inequality on a number line.

 Example: Sweeper Sara has no more than 5 employees working at a time. x < 5

Part IV: Final Details (15 points)

Answer the following. Include the question and the answer.

1. Explain what the independent (x) and dependent (y) variables represent, and how they relate to each other.
2. What are three ways to represent a direct variation?
3. Compare and contrast equations and inequalities.

BONUS: Business Is Good! (5 points)

A. After six months of work, you decide to give one of your employees a 50% raise! Calculate the

 employee’s monthly wages, and display them for the entire year in a table and a graph. The graph

 must begin with the original pay rate for the first six months, and reflect the raise from months 7-12.

B. Does this graph show a direct variation? If so, what is the equation? If not, explain your reasoning.

Unit 4 Performance Task Rubric Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

