

Do not write your name on the assignment. Write your name only on the back of this sheet of paper and staple your answers on the front of this sheet of paper. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. The Excel file will be handed in via Moodle. Your name will only appear on a page of the file that has nothing else on it. Failure to follow these directions will cost you 1 point on the assignment and failure to type it will cost you 10 points.

1) (25 points) Explain the natural rate of unemployment using references to changes in the labor market. Use that to explain why the rate of unemployment is higher in Germany than in the USA.

2) (25 points) Discuss three problems with high unemployment other than reduced output. Explain how high unemployment causes them.

The questions below refer to the spreadsheet "lab" on the Excel file "[Week6.xls](#)"

3) (25 points) Run the regression using the data in the first two columns. Remember the proper way to use the time to predict sales. Would you be willing to rely on this information to estimate the quantity over time? Why or why not?

4) (25 points) Use the data in columns F - H to forecast quantity as a function of price and income. Check for multi-collinearity of the independent variables. Is it acceptable to leave both variables in? Why or why not? **If it is not acceptable**, re-run the regression without one variable and tell me why you left that variable out. **If it is acceptable**, then tell me how much you would expect to sell to a person with an income of \$50,000 if you charged \$10/unit.