Place your name on the back of this sheet of paper and nowhere else. Staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point. Turn in the Excel file via Moodle with your name on an otherwise blank sheet. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

All questions, except for #1 and #2, should be done before the laboratory.

1) (20 points) Use the data in the sheet Lab 1 on the Excel sheet <u>lab7.xlsx</u> to run a regression to predict sales as a function of income and price. Do the quick checks for heteroscedasticity and autocorrelation. If you find a problem, explain how you know you had that problem. If that **problem is autocorrelation**, then run a regression which would adjust for that problem. Explain what you did. If the problem is heteroscedasticity, then do the formal test for it and explain what you did.

2) (20 points) Use the data in the sheet Lab 2 on the Excel sheet <u>lab7.xlsx</u> to run a regression to predict sales as a function of income and price. Do the quick checks for heteroscedasticity and autocorrelation. If you find a problem, explain how you know you had that problem. If that **problem is autocorrelation**, then run a regression which would adjust for that problem. Explain what you did. If the problem is heteroscedasticity, then do the formal test for it and explain what you did.

3) (15 points) Use the supply and demand for \$ versus £ to illustrate an increase in the price level in the USA. Explain why the curve(s) moved as drawn. Which currency appreciated? How can you tell?

4) (10 points) Suppose that yesterday the exchange rate was $\pounds 0.5/\$$ and today it changed by itself to $\$1.9/\pounds$. Did the dollar appreciate, depreciate, revalue, or devalue? Show your work. Who in the USA would like this and who would not? Briefly explain your logic

5) (20 points) Draw the IS/LM/FE diagram. Illustrate the effects of a depreciation of the US\$. Explain why the curve(s) moved as drawn.

6) (15 points) Use the supply and demand for $\$ versus £ to illustrate an increase in the GDP of England. Explain why the curve(s) moved as drawn. Which currency appreciated? How can you tell?