Wilf Csaplar Jr.   Economics 350   Homework #8 (Lab #7)   **Due Wednesday 11/2**

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.

1) (25 points) Use the data in the sheet Lab 1 on the Excel sheet lab7.xlsx to run a regression to predict sales as a function of income and price. Do the quick checks for heteroscedasticity and autocorrelation. State what both results are and why they are or are not 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) (25 points) Use the data in the sheet Lab 2 on the Excel sheet lab7.xlsx to run a regression to predict sales as a function of income and price. Do the quick checks for heteroscedasticity and autocorrelation. State what both results are and why they are or are not 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) (20 points) Draw the long-run and short-run Phillips Curves for an economy which is at full employment and is expecting 5% inflation. Illustrate the effects of the Federal Reserve increasing the money supply by 2% and people changing their expectations to 3%. Explain why the curve(s) moved as drawn. Where are we now on the graph? Explain your logic.

4) (15 points) The unemployment rate has decreased to 4.2%. What is that going to do to the natural rate of unemployment? Explain your logic including explaining the theory you used.

5) (15 points) Suppose that the price level started at 400 and by the end of the year was 440. How much was the inflation? If people had expected 8% inflation, then who is helped by this? Mention two groups of people and explain how they are helped.