

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 10 points. Turn in the Excel file via Canvas 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) (15 points) Explain the hysteresis theory of the unemployment rate at full employment. What does that mean has happened to the full employment unemployment rate? Explain your logic.
- 4) (20 points) What is TIP? Explain how it is supposed to reduce the inflation rate. Also explain how it might cause the inflation rate to increase.
- 5) (15 points) We have said that credibility is important for a central bank to impact the inflation rate without having much impact on the GDP. Explain why this is true.