

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) (15 points) President Reagan's 1980 campaign invented a measure of how bad off we are. He called it the *Misery Index*. It was calculated by adding the inflation rate and the unemployment rate. Implicitly, that assumes the damage from  $x\%$  inflation is the same damage done by  $x\%$  unemployment. Do you think that is a good assumption? Explain your logic.

2) (15 points) Some people think that using TIP is a good way to fight inflation. Explain how it could work and how it could make things worse.

3) (20 points) Suppose you were asked for help by the person in charge of monetary policy for a country which has had high inflation for a few years. What two questions would you ask them about their country before you decided whether they should use a rapid or a gradual reduction in the inflation rate? For both questions you'd ask, explain why you would ask that question and how the answer would determine which policy you would recommend.

The next two questions will be answered during the lab.

4) (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. 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.

5) (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. 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.