

Write your name on the cover of the test booklet and nowhere else. Enclose this sheet with the booklet. The Excel file will be handed in via Canvas. 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. The test has 100 points (to be scaled up to 170 points) and is scheduled to take 50 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 10-point question should take 5 minutes.

1) (18 points) Use the Excel® sheet “Question #1” on the [file](#). Run the regression to predict the quantity of dogs sold as a function of the prices and income. Are the overall results good? Explain your logic. Which variables are significant? Explain your logic. Run the test for multi-colinearity. Is there a problem? Explain your logic. **If there is a problem**, solve the problem and tell me why you solved it in the manner you did. **If there is no problem**, calculate how many dogs would be sold if the price of the dog was \$40/dog, price of a cat was \$210/cat, and the income was \$92,000.

2) (22 points) Use the Excel® sheet “Question #2” on the [file](#). Run the regression to predict the quantity as a function of price. Do the quick tests for heteroscedasticity and autocorrelation. Did you find them? State how you got your results for both tests. **If you found only autocorrelation**, run a regression to correct the problem. Briefly explain what you did. **If you found just heteroscedasticity or if you found both**, do the formal test for heteroscedasticity. Explain what you did and tell me the results. **If you find neither**, calculate how much would be sold if the price was \$57/unit.

3) (10 points) For EITHER menu costs OR imperfect competition (kinked demand curve), explain why it may cause price rigidity.

4) (10 points) Answer EITHER Part A OR Part B.

A) When you took *Principles of Macroeconomics*, I was saying the  $\bar{u}$  was 6%. I am now saying it is 5%. Explain the economic theory which I used to change my estimation of  $\bar{u}$ .

B) Explain how *tax-based income policies* can be used to decrease inflation.

5) (12 points) Draw the supply and demand for the US\$ with the other currency being the Japanese yen, ¥. Illustrate the effects of the EITHER the event in Part B OR the event in Part C. Explain why the curve(s) moved as drawn. Which currency appreciated? How can you tell?

A) Interest rates in Japan go up. (They really can't go down.)

B) The Japanese GDP drops.

6) (14 points) Answer EITHER Part A OR Part B.

A) Draw the Augmented SRPC/LRPC diagram for a country which currently has 7% expected inflation and 5% actual inflation. State how you see the 7% and the 5% on the graph. Suppose the government announced they were only going to increase the money supply 3% but actually increased the money supply 4%. Show the effects of these actions assuming people believed the 3% announcement. Explain why the curve(s) moved as drawn and how you found the new point.

B) Draw the Augmented SRPC/LRPC diagram for a country which currently has 4% expected inflation and 6% actual inflation. State how you see those numbers on the graph. What can the government do to move the LRPC curve to the left? Explain why it would have that effect.

7) (14 points) Answer EITHER part A OR part B.

A) Explain how paying an efficiency wage may cause real wage rigidity. Use the efficiency wage diagram in your explanation.

B) Draw the real MS/real MD diagram for an economy in a liquidity trap. Use it to explain why Neo-Keynesian feel that expansionary monetary policy may not work at times.