

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. Place your name on an otherwise blank page of the Excel file. 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.

The material for Question #1 below will be covered during the computer lab on 9/9 and you will do it during the computer lab. The other questions should be answered before the lab.

1) Suppose consumption is \$100 more than 72% of what you consider to be this year's disposable income. To calculate what you consider to be your disposable income, you subtract this year's taxes from the average of this year's income and the previous two years' income. The tax rate is 20% of this year's income. Investment is 34.4% of this year's GDP. Government spending is \$300. Exports are \$200. Imports are 5% of this year's GDP.

A) (5 points) Write the equations I described above.

B) (15 points) Find the current level of GDP as a function of government spending and lagged variable(s). Show all work.

C) (5 points) Use Excel to fill in a table which will simulate GDP over a 40-year period and assuming that the previous two levels of GDP were \$2,000.

D) (10 points) Plot GDP over time, making sure everything is labeled properly.

D) (5 points) What is the pattern of GDP? Explain your logic.

2) (30 points) Draw the LRAS/SRAS/AD and IS/LM/FE diagrams with the economy starting with high unemployment. Illustrate what will happen if the economy is left alone. Explain why the curves moved as drawn. What happens to GDP, interest rates, and the price level?

3) (30 points) Illustrate an adverse demand shock on the LRAS/SRAS/AD and IS/LM/FE diagrams. Explain why the curves moved as drawn. What happens to GDP, interest rates, and the price level?