

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.

1) (20 points) Draw the LRAS/SRAS/AD diagram 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 and the price level?

2) (20 points) Illustrate an increase in the income tax on the LRAS/SRAS/AD diagram. Explain why the curves moved as drawn. What happens to GDP and the price level?

3) (20 points) Illustrate an positive supply shock on the LRAS/SRAS/AD diagram. Explain why the curves moved as drawn. What happens to GDP, and the price level?

The material for Question #4 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.

4) Suppose consumption is \$100 more than 75% of (the average income from this year and the previous two years minus this year's taxes). (Note this is not the average of the disposable income.) Investment is 45% of this year's GDP. Government spending is \$600. Exports are \$200. Imports are 12.5% of this year's GDP. The taxes are 15% of income.

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.