

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 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.

This question refers to the spreadsheet “Lab” on the Excel file “[lab8.xlsx](#).” Each date is for the two-month period which starts then. So, “Jan. 2002” is for January and February of 2002.

1A) (40 points) Calculate the columns *Centered Moving Average*, *Preliminary Seasonal Indicator*, *Average Seasonal Indicator*, *Revised Seasonal Factor*, and *Total Seasonal Factor*.  
B) (10 points) If the company sales of \$120 in the May and June of this year, what would the seasonally adjusted sales be? If the company did \$600 of sales this year, how much would you expect to be sold in the November and December? For both questions in Part B, do the calculation directly on the spreadsheet and type an explanation of what you did.

2) (25 points) Draw the supply and demand for US\$ on the foreign exchange. Put a peg on it such that the US\$ is overpriced. How can you tell it is overpriced. What must the Fed do to keep the exchange rate up there? Explain your logic. If you saw this happening and you did a lot of exchange with foreign countries, what would you do? Explain your logic and illustrate the effects of that on the graph. Explain why the graph moved as drawn.

3) (25 points) Draw the diagram which shows the fundamental and official exchange rates as a function of M. Explain why the lines take their shapes and why that means the central bank cannot control both the money supply and the exchange rate.