

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 Canvas with your name on an otherwise blank sheet. Your written parts can be handwritten or typed, but will be turned in on Canvas as a pdf. You can use pdfcandy.com to convert pictures into pdfs.

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) (10 points) Suppose that yesterday the exchange rate between the dollar and the yen was $\text{¥}120/\text{\$}$ and today it is $\text{\$}0.01/\text{¥}$. Which currency gained value and which lost value? Explain your logic and show all work. Is that appreciated and depreciated or is it revalued and devalued? Explain your logic.

3) (20 points) Draw the J-curve. Why does it take that shape? What does that imply about the stability of the exchange rate? Explain your logic.

4) (20 points) Draw the supply and demand for the euro, €, with the other currency being the British pound, £. Illustrate the effects of interest rates going down in Britain. Explain why the curve(s) moved as drawn. Did the euro appreciate, depreciate, revalue, or devalue? Explain your logic.