

Do not write your name on the assignment. Write your name only on the back of this sheet of paper and staple your answers on the front of this sheet of paper. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. The spreadsheets will be turned in via an attachment to an e-mail sent to wcsaplar@bethanywv.edu. The only place your name should appear on the electronic file is on a page with nothing else on it. Failure to follow these directions will cost you 1 point on the assignment.

1) Use the [spreadsheet 9-24.xls](#), page HW to answer the following questions.

A) (20 points) On the spreadsheet, calculate the Laspeyres Index for all years with 2000 as the base year. Repeat for base years 2001 - 2004.

B) (15 points) Calculate the inflation rate for each year with each base year.

C) (5 points) Graph the inflation rate over time when the base year is 2001.

D) (20 points) If you did part B correctly, then the inflation rate in 2003 is negative. Looking at the raw data, three of the five products had inflation. What caused the deflation? Find the price index which puts the greatest weight on that good. What is the deflation in 2003, measured in the base year you just chose? Is that large or small? Briefly explain your answer to each section of part D.

2) (10 points) Explain why the $\Delta Y/Y$ line on the neoclassical growth model slopes up and has a positive intercept.

3) (10 points) The book states that if at the current σ , the growth rate of capital exceeds the growth rate of GDP, the productivity of **capital** will drop. Explain the reason which they did not give.

4) (20 points) Illustrate on the graph of the neoclassical growth model, an increase the savings rate. Explain why the curve(s) moved as drawn.