

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.

All of these questions refer to the spreadsheet “HW” on the Excel file “[10-29.xls](#)”.

- 1) (35 points) Run the regression for the data in the first columns, with Y as a function of X. Determine if there is a problem with autocorrelation and heteroscedasticity. Show all work and briefly explain how you ran each test and what your results are.
- 2) (35 points) Run the regression for the data in the second columns, with Y as a function of X. Determine if there is a problem with autocorrelation and heteroscedasticity. Show all work and briefly explain how you ran each test and what your results are.
- 3) (15 points) Explain what a diffusion index is. Why is it important?
- 4) (15 points) Why do we calculate the ratio of the index of coincident indicators to the index of lagging indicators?