This problem set is due on Wed 20 September 2006 at the start of class. Please turn in a hard copy of your answers (only printed - no handwritten solutions, please).

## Instructions

There are four total problems. Please submit a single Word document that answers each of the problems (and all of their sub questions) clearly, concisely, and completely.

The format for the Word document is as follows:

- Font: Times New Roman, 12 point
- Margins: 1"
- Double spaced
- Make sure your name is listed on each page
- Number each page in the top right corner

If you wish, you may attach a printed out copy of a sampling of your supporting spreadsheet formulas (use the Ctrl-` key to show all formulas). Additionally, you may post your supporting spreadsheet to the class website under the appropriate homework assignment. For all files posted to the website, please use the following naming convention for the file and posting so that we can identify the author:
LastName_FirstName_PS\#.xls with each tab named for the specific question.
This is an independent assignment and should be completely individual work. Students may use library references, but collaboration between students is NOT permitted for the memo. For the Excel spreadsheet, you are allowed to help each other on functions etc but no comparing of final answers or results. If in doubt, ask me or Tony.

Please make it easy for Tony to understand what you were trying to do.
Good luck and happy forecasting!
Chris

## Problems

Textbook Problems. Answer Problems 4.1, 4.2, and 4.8 in SPP. The data for these problems are in the file ESD260_PS1_Fall2006_Data.xls. For 4.2, be sure to explain and justify your modeling approach.

Case Problem Suppose that the data in (ESD260_PS1_Fall2006_Data.xls, Tab Case) represent actual weekly sales, in thousands of cases, of a product that you manage. Your marketing team has run a promotion on this product at the start of week 22, 35 , and 66. They are planning on running a similar promotion at the start of week 106.

In no more than ONE PAGE, please:
a) Generate and explain a forecast for the demand for the next quarter (weeks 101 to 112).
b) Quantify the total benefit (in units of demand) for a promotion of this type
c) Describe and justify the technique that you used for the forecast along with any assumptions that limit your results.

