Assignment 1 required a download of data from the class web site, blah, blah, blah.

1. This is a typical solution to a typical homework problem. Usually a text response is necessary. If not, provide some brief description to the reader. DO NOT just paste code into your solution. Briefly describe what the code does – one sentence is often sufficient. Describe the output of the program and include any plots created. The solution to problem 2, below, shows examples of how to include plots as Figures with numbers and captions.

The text of this solution is formatted with the “text problem” style in MS Word. Using styles helps to create uniform formatting in MS Word documents.

a. Sub-part (a) of the problem is formatted with the “text problem sub” style.

b. Sub-part (b) of the problem is formatted with the “text problem sub” style.

2. Figures 1 through 4 show the result of inserting MATLAB plots into MS Word in three different ways. In all three cases, the plot was created with MATLAB 2.015b with the following commands

x = linspace(0,2\*pi);

plot(x,sin(x));

xlabel('\theta');

ylabel('sin(\theta)')

Figure 1 shows the default appearance of the plot.

Figure 2 shows the plot that was created after the thicklines command was issued.

thicklines

x = linspace(0,2\*pi);

plot(x,sin(x));

xlabel('\theta');

ylabel('sin(\theta)')

Note that thicklines needs to be used only once per MATLAB session. The thicklines command was written by G. Recktenwald and based on a suggestion of Nick Trefethen. To use thicklines, first download it from the course web site and put it in a directory that your MATLAB set-up can use.

Figure 3 shows the plot created with the same steps as the plot in Figure 2. Instead of using a copy/paste operation, the plot was saved to a PNG file with the following print command

print -dpng sine\_plot.png

The print command is issued after the plot is created. The result is that the sine\_plot.png file is created in the current working directory. That PNG file was then imported into MS Word with the “Insert Picture” command.

The plot in Figure 4 was created with the same steps as the plot in Figure 2. This time, the plot was saved as an EPS file with the following print command

print -depsc sine\_plot.eps

The EPS format can be imported into the Macintosh version of MS Word.

Plain picture with Copy Figure and Paste



Figure 1 A MATLAB plot inserted into MS Word with Edit -> “Copy Figure” (in MATLAB) and then “paste” in MS Word.



Figure 2 A MATLAB plot inserted into MS Word with Edit -> “Copy Figure” (in MATLAB) and then “paste” in MS Word. The plot was created after the thicklines command was issued.



Figure 3 A MATLAB plot inserted into MS Word from a PNG file.



Figure 4 A MATLAB plot inserted into MS Word from a EPS file. The plot appears a little larger because the EPS image created in MATLAB does not have the large white-space borders that are created in the PNG and in the copy/paste images.