

Computer Stuff

Math241

fall, 2006

The software package used in this course is MATLAB. MATLAB is available on both the Glue system and the WAM system. The campus uses versions 6.0 and higher, but version 5.0 is fine. You can also use the student version of MATLAB on a PC or Mac. We shall learn the elements of MATLAB that we need as we go along. You will also need to know something about writing files and moving them around in either the PC framework or the unix framework.

You must have an account on either the WAM system or the Glue system. To get an account on the WAM system go to the AITS Consulting Lab, Room 1400, in the new wing of the Computer and Space Science Building during business hours (M-F, 9:00 - 4:30); bring your campus ID with you. (AITS means Academic Information Technology Services, formerly the Computer Science Center.)

You will also need a printing account. You can get the information about the printing account from the AITS consulting lab.

The AITS Consulting Lab has a hot line to help you with computing questions. The number is 405 - 1500.

Using MATLAB

Starting up and Writing mfiles

For PCs on the WAM system or in the Math Dept. OWL lab, rm 0203. After logging, go to Start, then to programs, then to applications, then finally click on MATLAB.

When MATLAB comes up, it starts on a drive that does not allow you to write and save files. We must switch to the H drive where your home directory resides. In MATLAB, enter

```
>> cd H:
```

This should place you in your home directory. If you made a subdirectory for your math 241 work, say "math241", you should move to it with another cd command

```
>> cd math241
```

Now you can write mfiles in this directory and MATLAB will be able to find them.

When you write a diary file, with a name like "prob1diary", it is stored in the current directory. However, it is not a MATLAB mfile, and cannot be opened within the MATLAB debugger/editor. To see what is in the diary file, and to edit it, go to an icon on the screen, upper left corner, where normally you find the icon "my computer" In the WAM lab pg2, you find the same symbol, but with the title,

```
.    home on  
.    "pg2nt23 "
```

Click here. This will show all the files and folder in your home directory. Open the folder which contains your math 241 work. You should see the file "prob1diary". Click on it. Then go to "File" in the upper left, and drawn down the menu. The top line of the menu is "open" or "open with". This produces another menu with a list of various applications like "Excel" and many others. Go to "NotePad" and click. This will open the diary file, and you can now edit it.

Getting the Mfiles of the MATLAB Companion

In addition to some standard MATLAB functions and plotting features, you will also be using some programs I have written in MATLAB. They are available on my web page located at

www.math.umd.edu/~jec

You should download these files as needed into a directory where you store your MATH 241 computer work.