Assignment #1

DUE Wednesday 30 September, 2009

Goal of this assignment: Learn how to use *Matlab* or *Octave* as a supercalculator and as a programming language for technical computing.

Do these things:

- Read what the syllabus has to say about the use of *Matlab/Octave* in the course, and how to get yourself a copy.
- Install a functioning copy of *Matlab/Octave* on a computer you have regular access to, or confirm it is already there.
- Read and follow the examples on pages 1–31 in the free supplementary text Moler, Numerical Computing with Matlab,

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http://www.mathworks.com/moler/index_ncm.html
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Sections 1.1, 1.2, 1.3, 1.4, and 1.6 are the important ones; section 1.5 is completely optional.

- Do these exercises on pages 42–47 Numerical Computing with Matlab:
 - 1.2 1.4 1.5 1.6 1.8 1.19 1.20 1.30 1.38 1.39
- Exercises 1.13, 1.14, 1.17 are extra credit.

Note for *Octave* users: The program fern.m does not work as is in *Octave*, but finitefern.m does. The files durer.mat and detail.mat are not built into *Octave*; ignor those examples. The program threenplus1.m does not work as is in *Octave*, but it is easy to comment out the GUI stuff and get a functioning program.