Mathematics 241 – Multivariable Calculus
General Information on Maple in SW 219
September 7, 2010

Launching Maple

To get into Maple, you will need to follow this process.

1) When you start a session, you should see login window for your username and password for the campus network. (If the a desktop with icons, etc. is showing, that means previous user has probably not logged off. Use RedHat/Log Out to terminate their session and start afresh.) Enter your username and password. (This will be the same as on the rest of the campus network, but you should not put in the "context" in the username (for instance, I would just enter `jlittle`, not `.jlittle.math.acad.hcnet`.
2) You should now see the Linux desktop. The "Red Hat" button at the lower left of the screen acts much the same as the Start button in Windows. When you click that with the left mouse button, you should see a MathCS_Applications pulldown menu. Find Maple 13 there and highlight that option to launch Maple.
3) After a few more seconds you should see a new Maple 13 window, with a "subwindow" marked Untitled (1) opened inside it. The Untitled (1) window is a blank *Maple worksheet*.

Maple Worksheets

Worksheets are integrated documents where any or all of the following can be done:

a) you can type in commands from the keyboard to ask Maple to perform many different kinds of calculations,
b) Maple will generate output (numerical values, symbolic formulas, and graphics),
c) you can modify commands, generating new output, in our session today.
d) you can enter text to annotate and explain the results of computations.

Take a few seconds and notice the features of this window – especially the "tool bar" across the top with the icons for various operations, the "scroll bar" on the right that you can use to move around within the worksheet, to see previous input and output lines, the menus of symbols on the left, etc.

Input and Text Regions in a Worksheet

Space for new input will be generated automatically at the bottom of a worksheet each time you enter a command and execute it at the end of a worksheet in progress. You can also insert text and input regions by using the Insert pulldown menu from the tool bar in the Maple window.

Maple worksheets can contain text for explanation and comments (and answers to questions on lab assignments!) as well as commands and output.

Saving and Reloading your Maple Worksheets

When you begin working on a worksheet, you will want to *save your work* every once in a while in case a computer problem develops, or in case you need more than one lab session to complete the work you are doing. This can be done most directly by saving to your personal network directory. Follow these directions:

1) In Maple, select the SAVE option from the FILE pull-down menu or press the toolbar icon that looks like a diskette.
3) If you are saving your work for the first time, you will see a SAVE AS dialog box. Make sure your personal campus network directory is showing in the *Save in:* box, then go to the *File name:* box, and type in a name for the file (any string of letters and digits is OK). A good choice would be something like *labday1*. Then click the Save button. Maple will save the file with the full name *labday1.mws* in your directory. You only need to type in the filename in once in a session. Subsequent saves (i.e. FILE/SAVE or clicking the diskette toolbar icon) just update the file.
4) When you have the worksheet saved as you want it, you can exit Maple, or continue working.
5) To update the worksheet further in a later session, get back into Maple as above, and read the worksheet back into Maple using the OPEN option from the FILE Menu or the "opening folder" toolbar button. Maple will prompt you as above for the name of the worksheet with a dialog box very like the SAVE AS box described above. Make sure your Linux network directory is showing in the *Look in:* box, then highlight the worksheet you want, and click the Open button.

Printing in SW 219

To print a Maple worksheet in SW 219, click the toolbar icon that looks like a printer, and press OK on the PRINT dialog box (the settings should be set up correctly to print automatically). Your output should appear shortly on the printer at the side of the lab. If you have problems, or if the printer runs out of paper, come and get me or another math faculty member for help. (If several print jobs are sent at the same time, you may need to wait a short time.)

Getting Out

When you leave, quit the Maple window (FILE/EXIT), and log off the campus network (Red Hat/Log Out).