# General Information on Maple in HA 408 January 19, 2006

# Launching Maple

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

 When you start a session, you should see a Novell Client window with prompts for your username and password for the campus network. (If the Windows desktop is showing, that means previous user has probably not logged off. Use START/Shut Down/Log Off Holy Cross to terminate their session and start afresh.) Enter your username (with full context – mine looks like this:

#### .jlittle.math.acad.hcnet

Your context will show you're a student, and which graduating class you are a member of. If you don't know it, then you can select the appropriate one from Advanced/Contexts on the Novell Client window.) Then enter your network password. A second login window marked *Windows Workstation* will appear at this point; you should be able to just click OK on this one and proceed to step 2.

- 2) You should now see the Windows desktop. There are *two* Maple 9 icons here. We will use the *gold-colored one* named *Classic Worksheet Maple 9*. Double click on that Maple 9 shortcut.
- 3) After a few more seconds you should see a new Maple 9 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 at the *input prompts* [>, 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, etc.

#### Input and Text Regions in a Worksheet

A new input prompt 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 a command prompt* and an input region at any point in the worksheet by placing the cursor at the desired location and pressing the toolbar button marked with [>. (After executing an inserted command like this, Maple will drop to the next input line, so to insert several input lines in the middle of a worksheet, you will need repeat the above.)

Maple worksheets can contain text as well as commands and output. To create a text region, press the [> button above, then the button marked by a capital T (this changes the region into a text region). Text can now be entered, and that will be treated as an "inert" comment. That is, it will appear as you enter it when you print out the worksheet, but it will not be treated as Maple input. Within a text region, if you press ( $\Sigma$ ) toolbar button with the cursor placed on that region, you can type in a Maple expression in input format, and have it displayed in usual mathematical notation (with raised exponents, no asterisks for multiplication, etc.) This is sometimes useful for creating worksheets with explanations or comments on the work you have done if you want to include a formula.

## 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 network P: drive. 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 campus network P: drive 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 – no spaces – no more than 8 characters long is OK) type in a period after the file name you chose and then the "extension" mws for Maple work sheet. For instance, a good choice might be something like labday1.mws. Then click the Save button. 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 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 campus network P: drive is showing in the *Look in:* box, then highlight the worksheet you want, and click the Open button.

## Printing in HA 408

To print a Maple worksheet in HA 408, 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 end 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 (START/Shut Down/Log off Holy Cross).