The Maple Lab for Math-142: An Introduction

Douglas Meade, Ronda Sanders, and Xian Wu Department of Mathematics

Note

If you took Math-141 or Math-142 last semester, this will serve as a review for you. You can skip **Part A** as you should have the same account (in MS) as you had.

Welcome

Welcome to the computer laboratories and classrooms in the Department of Mathematics at the University of South Carolina. If you are reading this as you are waiting for your lab session to begin, introduce yourself to another student in the lab and wait for your TA to begin the lab.

Instructions

The purpose of this week's lab is for you to become familiar with the MS network and Maple 12. You will learn how to login and logout of the network and how to access Maple 12 and the Internet. Once this is complete, you will begin to learn about Maple by working through an interactive Maple worksheet.

A. Login and Logout

- When you are seated at a computer on the MS network, begin the login process by pressing **Ctrl-Alt-Delete**. This will open a window in which you will be asked to enter your username and password.
- Your permanent *username* in the MS network is the same as your Blackboard username. Your TA should have a list containing your username if you do not know it. Your initial MS *password* is your nine-digit student ID number.
- If you have trouble with your username login, tell your TA and ask for a temporary login. Don't save anything on the computer with a temporary login. All temporary logins will be disabled within a week.
- Once you are logged in, take a look at your Windows desktop. You should see several icons, including ones for *Internet Explorer* and *Maple 12*. To see your personal folder on the MS network, open **My Computer** and click the **Z**: drive.
- Change your password. To do this, press **Ctrl-Alt-Delete** and then click the button labeled **Change Password**. You will need to re-enter your current password, and then your new password (twice). The system may not accept passwords that are simple words or otherwise to easy to guess.
- To logout of the MATHSTAT network, click **Start** button or press **Ctrl-Alt-Delete**. Click on **Log Off** ... confirm that you want to logout be pressing the button labeled **Log Off**. **Do not turn off the computer**. Prior to leaving the computer, visually verify that it is ready for the next user to login.

B. First Look at Maple

- If you are not already logged in to the computer, please do so now. (See **Part A**.)
- Locate and double click the Maple 12 icon (**not** the Maple 12 Reader icon) on the desktop.
- When Maple 12 starts the first time, a **Security Alert** will appear. Check the box so that the message won't appear again. Next, a startup window will open and you should click the **Worksheet** box. A Tip of the Day will also be displayed. These tips can be useful, but most of them will not be relevant to you at this point. Close this window now.
- You may want to have the Maple window enlarged to fill the full size of the monitor. To do this, click on the middle icon in the upper left corner of the border of the Maple window.

Maple Preferences

Our first task is to set up the interface of Maple 12 to our standard. Each user must configure Maple upon initial entry. You must set your preferences as specified below. Otherwise, you will not be able to follow the labs, and the information the TA gives you may not work properly. You should only have to do this the first time you use Maple 12 using your MS login on any lab computer. Of course, you need to do the same initial setups on other computers (such as on your laptop).

- Pull down the **Tools** menu and choose **Options..**.
- Click the **Display** tab. Change the settings if needed to show:

Input display:Maple NotationOutput display:2-D Math Notation

• Click the **Interface** tab. Change the settings if needed to show:

Default format for new worksheets: Worksheet

- Click Apply Globally button on the bottom.
- The change will take effect next time you start Maple 12. So exit your maple session now (under the **File** menu, select **Exit**).

Accessing the Internet and Lab Materials

- Internet Explorer is the standard browser provided in the MATHSTAT computer labs. An icon for Internet Explorer should be on your desktop. Double click this icon to launch the browser.
- Open the Lab homepage (http://www.math.sc.edu/calclab/142L-S09/). Add this page to your list of favorite websites.
- The lab homepage contains links to all lab materials such as the Lab Syllabus and additional resources
- From the Lab homepage, click on the Lab Schedule/Assignments. This page contains the weekly lab assignments. For Lab 1, you will see links to this handout, the New User's Tour, and this week's assignment. The page will be updated weekly.

New User's Tour

- From the Lab Assignments page, double click on the **New User's Tour**. Your TA will walk you through this interactive introduction to Maple 12.
- Note that lines that begin with > are for executable Maple commands. To execute, such a line must end with a semicolon (;). Place the cursor anywhere on the line and press Enter. The result will appear, in dark blue, immediately below the command. Other lines are for normal text such as instructions and comments.
- If you want to be able to return to anything you have worked on in Maple you must save your work as a Maple worksheet. It is best to save your work to the **Z**: drive by selecting **Save As...** from the **File** menu on the Maple window.
- When you have finished (or the lab session ends), please exit your Maple session and to logout of the network. Do not forget to save useful work to the **Z**: drive before exiting.

Assignment

This week's assignment is to complete the **New User's Tour** and start reviewing 141 Maple labs. Please go to http://www.math.sc.edu/calclab/141L-F08/labs/ and click on labs that you would like to review. If you did not have Math-141 at USC, you should study basics from Labs B, G, and M first. Please see your TA if you need help.