

Running Mathematica on PCs (BRB 4th Floor Lab)

Partial Equilibrium Lab

Login Review:

- (1) Press <Ctrl>+<Alt>+ to bring up login prompt
- (2) Type in your UT EID and password
- (3) Select 'Austin' as the network (if the option appears)

Quick review on how to download files needed for the lab

- (1) Open a browser such as **Internet Explorer** or **Mozilla Firefox**.
- (2) Go to the class website at <http://laits.utexas.edu/compeco/Courses/index363.html>
- (3) Find the lab of interest (organized by date) in the program archive table on the website. The third column contains the necessary Mathematica notebook files, and have file extension “.nb”
- (4) Download the files in the code column by right-clicking on the file name and choosing “Save Link As...” (Firefox) or “Save Target As...” (Internet Explorer). Left-clicking on the code links will open the text in the browser, but will not download the file. Make sure to note where you saved the file (e.g. Desktop, My Documents, etc.).

Running Mathematica on PCs

- (1) Double click on the **Mathematica** icon on the desktop
- (2) A new window named “Untitled” will appear. The content of this window will be a white sheet called a **Notebook**, which is similar to a document in a standard word processor
- (3) Go to the “File” menu and click Open to go to the relevant directory and open the files
- (4) To run an unput command or a cell containing a series of commands, click on the bracket on the right of the cell and hit <Shift>+<Enter> (or <Shift>+<Return>). The output will be displayed immediately after the input, unless there is a semi-colon (;) at the end of the input command line (which suppresses the output). You can run multiple cells at the same time by highlighting the corresponding brackets with your mouse and hitting <Shift>+<Enter> once. You may get warning messages about similar sounding variable names. **If Mathematica asks whether it should automatically evaluate all initialization cells, please choose “No.”**
- (5) Modify command(s) and re-run them sequentially, cell after cell, so that you can see the changes in the corresponding outputs.
- (6) To save your Notebook, File >> Save (or Save As...). To exit, File >> Quit.
- (7) Some miscellaneous notes on running Mathematica:
 - (a) There are different kinds of cells: they can contain text, Mathematica input, Mathematica output, or graphs (and more).
 - (b) Different fonts within each bracket identify the kind of cell.
 - (c) To edit a cell, just click on its bracket
 - (d) To edit a group of cells, click and drag across their brackets
 - (e) To find out or change the cell type, click on the cell bracket, then select “Style” from the main menu and choose your option.
 - (f) To divide or merge cells, take the cursor to the division/insertion point of choice, select “Cell” in the main menu, and choose your options
 - (g) To run a portion of a program contained in a cell or group of cells, select the appropriate cells, select Action >> Evaluate in the main menu (or use <Shift>+<Enter>).

Ending a Session

- (1) Click on the <START> button on the bottom leftmost portion of the screen
- (2) Click “Logout”
- (3) NOTE: be sure to remove any CDs before logging out, and be sure to take any removable media (e.g. thumb drives) with you.

Lab Specific Notes

- (1) If you are using PCs in the 4th floor lab, remember to **back up your work**. Once you log out, all work saved to the local computer is gone. This means **email it to yourself, save it to webspace, backup to your personal Dropbox account, save it to a thumbdrive**, or use some other method to ensure you have backed up your work.
- (2) The portfolio program uses the Optimization Toolbox and can be run on any computer that has Mathematica **with this toolbox** installed.