

Getting Started in Matlab

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September 16, 2008

MATLAB is available on all computers in GMCS 422/425/428. Hours in the Lab are M-Th 9AM-10PM, FSat 9AM-4PM. You should probably have a flashdrive to store your material.

- To start MATLAB, **click** on
 - START → PROGRAMS → MATLAB *version* → MATLAB *version*
- Matlab opens with one window with 3 panels:
 - Workspace / Current Directory
 - Command History
 - Command Window
- **Click** on the “*Current Directory*” tab at the bottom of the top left “*Workspace / Current Directory*” window. Then **click** on the button with three dots “...” in the top row; **select** the location of your flashdrive (this is where you will save your work).
- **Right click** in the empty space in the “*Current Directory*” window, and **select** “NEW → M-FILE.” Name the file “**justtesting.m**” **Doubleclick** on “**justtesting.m**” to open it (for editing). Erase everything, and enter the following content:

```
disp('Just making sure it works...')  
2^6
```

- **SAVE** — **click** on the disk!
- In the command window, type “**justtesting**” (without the quotation marks). You should see the following output:

```
Just making sure it works...  
ans =  
    64
```

- Congratulations, you have just executed your first(?) Matlab m-script!
- You can also work interactively in the command window. Try typing

```
>> pi
ans =
    3.1416

>> format long; pi
ans =
    3.14159265358979
```

- To define a vector containing values between $-\pi$ and π , with a step of 0.1, type:

```
>> x = -pi : 0.1 : pi;
```

The semicolon (;) suppresses the output. Just type

```
>> x
x =
    [ yada yada yada ..... ]
```

To see the contents of x. Lets try plotting:

```
>> plot(x, sin(x))
>> plot(x, sin(x), 'r', x, cos(3*x), 'b')
```

- The command “**help**” is your friend! Try for instance

```
>> help plot
>> help help
>> help function
```

- To exit and log off:

FILE → EXIT MATLAB

- Setting up printing: — You will want/need to print things... There are (hopefully) instructions in the lab on how to set up your account to print on the lab printers.

- Online Matlab Tutorials.

Check out <http://www.math.mtu.edu/~msgocken/intro/intro.html> for an introduction to Matlab. Feel free to Google for “matlab tutorial” – there’s a bunch of them available online!

- Play around and get (somewhat) comfortable!

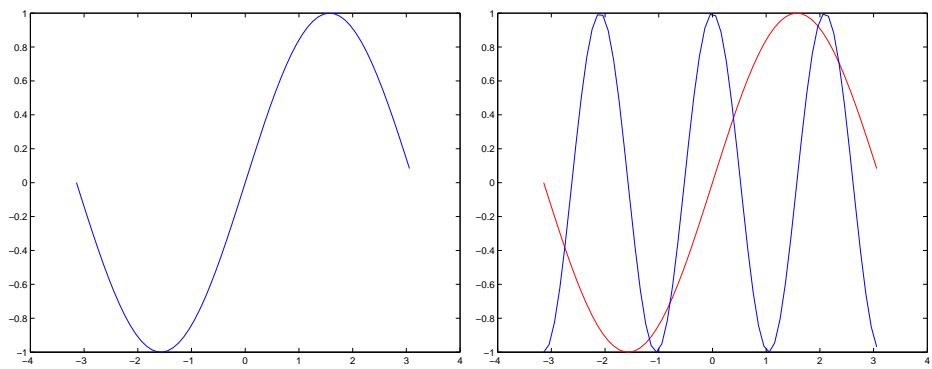


Figure 1: [LEFT] `plot(x, sin(x))`, and [Right] `plot(x, sin(x), 'r', x, cos(3*x), 'b')`
