

Command Line IO and Interactive Plotting

Do the following:

1. Open MATLAB, choose MATLAB Help to open the help window, choose "Learning MATLAB; Matrices and Arrays; Controlling Command Window Input and Output" from the content tab of the Help Navigator Window. Fill out the appropriate student notes section below.
2. Read the "MATLAB; Graphics; MATLAB Plotting Tools; Plotting Tools—Interactive Plotting" Help section. Fill out the appropriate student notes section below.
3. Read the "MATLAB; Learning MATLAB; Graphics; Examples—Using MATLAB Plotting Tools " Help section.
4. Watch the plotting movie on the www.staley-classes.org website. The link to the movie is labeled " [Plotting Tools Movie](#) ".
5. Mimic the movie and create an equivalent figure. Use the figure file menu to generate an M-file for this figure. **Print out and turn in the m-file for the figure and the completed notes section below.**

Project Two is based on the material on these pages.

Lesson Three Student Notes

Controlling Command Window Input and Output

The _____ function controls the numeric _____ of the values displayed by MATLAB. The function affects only how numbers are _____, not how MATLAB _____ or _____ them.

If you simply type a statement and press Return or Enter, MATLAB automatically _____. However, if you end the line with a _____, MATLAB performs the computation but does not _____.

If a statement does not fit on one line, use an _____ (_____ periods), ..., followed by Return or Enter to indicate that the statement continues on the next line.

To recall a previous command line for editing and reentry you can use the _____ key.

You can also copy previously executed statements from the _____ _____.

Interactive Plotting

MATLAB provides three basic plotting tools from the View menu by selecting _____ _____, _____ _____, or _____ _____.

The Figure Palette is used to create and arrange _____ _____, view and plot _____ _____, and add _____.

The Plot Browser is used to select and control the _____ of the axes or graphic objects plotted in the figure. You can also _____ _____ to any selected axes by clicking the _____ _____ control.

The Property Editor is used to set common _____ of the selected object. You can also click the Inspector button to display the Property Inspector, which provides access to all object _____.

The three panels for the Figure Palette are _____ (add 2-D or 3-D axes to the figure), _____ (browse and plot workspace variables), and _____ (add _____ to graphs).

The Plot Browser provides a legend of all the _____ in the _____. It lists each _____ and the _____ (lines, surfaces, etc.) used to create the graph.

From the Plot Browser you can set the _____ of an individual _____.

Start by double-clicking on the line in the Plot Browser. Its properties are displayed in the _____, which opens on the bottom of the figure.

With the Plot Browser open if you select a line in the graph, then the corresponding entry in the Plot Browser is _____, enabling you to see the specific portion of which variable produced the line.

The check box next to each item in the Plot Browser controls the object's _____.

To add a new set of data to existing axes you select the _____ in the _____ and then click the _____ button to display the _____ dialog. The _____ dialog enables you to select a plot type and specify the workspace variables to pass to the plotting function.

You can also specify a MATLAB _____, which is _____ to produce the data to plot.