**Class 25**

**Key Ideas**

* Scripts are sequences of instructions that are stored in a file and then executed sequentially
* Documenting scripts with comments is very important for good programming style
* Input into a script consists of prompting the user, and then reading the value in
* Output from a script can be formatted in many different ways
* General outline of many scripts, which is the basic algorithm for many programs, is:
* prompt the user and get input
* calculate results
* print the results in a nice formatted way
* There are many plot functions that allow you to visualize data

**Built-ins**

**Functions**

**input**: prompts the user and reads in one value

**disp**: prints an expression without formatting

**fprintf**: prints with formatting

**plot**: plots 2D points, by default as points with straight line segments between them, but there are many plotting options

plot labels:

**xlabel** puts a label on the x axis

**ylabel** puts a label on the y axis

**title** puts a title on top of the plot

**subtitle** puts a subtitle under the title

**Commands**

**type**: displays a script in the Command Window

**Assessment Questions**

Which of the following placeholders would be used to print an integer in a field width of 8:

%5d

%8f

%8d correct

(T/**F**): Every **fprintf** statement always prints a separate line of output