

## Appendix A

### TI-89 Keystrokes and Menus

#### Using TI-89 keys

The TI-89 primary keys are mainly used for numbers, arithmetic operations, commonly-used variables such as  $x$ , and controls like the **ENTER** key. Primary keys are indicated in this book with a key font, with the exception of **X, Y, Z, T** and numbers, which are displayed as text.

#### **2nd** functions

Most keys have a second function, indicated above the key in yellow. To access these functions, press the yellow **2nd** key, and then the primary key. For example, to enter **cos**, press **2nd** and then the **Z** key, because **COS** is in yellow above **Z**. These keystrokes will be indicated in this book as **2nd** [cos] with the brackets indicating that the command is the second and not the primary function of the key.

#### **♦** functions

Some keys also have another function in green. To access these functions, press the green **♦**, and then the primary key. For example, to enter **cos<sup>-1</sup>**, press the green **♦** and then the **Z** key because **COS<sup>-1</sup>** is in green above **Z**. These keystrokes will be indicated in this book as **♦** [COS<sup>-1</sup>], with the brackets indicating that the command is the green function and not the primary function of the key. There are additional green functions that do not appear on the keyboard. Press **♦** [K] to see these choices. For example, you will see that **♦**  $\div$  is **!**.

**alpha functions**

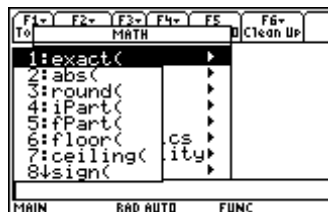
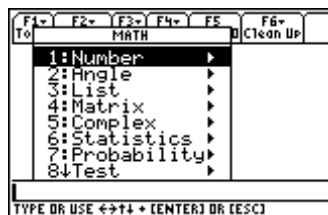
Most keys that do not have a green function have a purple letter above them. To access these letters, press the purple  $\alpha$  key and then the primary key. For example, to enter **A**, press the  $\alpha$  key and then the  $\square$  key because **A** is in purple above  $\square$ . These keystrokes will be indicated in this book as **A**. If you are typing several letters in a row, you can use  $\text{2nd}$  [a-lock], which will eliminate the need to press  $\alpha$  for each letter. Press  $\alpha$  at any time to release alpha-lock. The letters **X, Y, Z, T** are primary keys and do not need  $\alpha$ . If you forget and press  $\alpha$ , those keys will still enter the appropriate character. That is,  $\alpha$  **T** is the same as **T**. The  $\uparrow$  is a shift key to type upper-case letters. Press  $\uparrow$  and the key for a single upper-case letter. If you press  $\uparrow$   $\alpha$  you will be in upper-case alpha-lock. The  $\_$  is a space.

**Function keys / Toolbar menus**

The keys  $\text{F1}$  through  $\text{F5}$  in the top row access different menus or features indicated across the top of the screen. These choices vary depending on the Editor you are using. For instance, if you are on the Home screen,  $\text{F3}$  is the **Calculus** menu; however, if you are on the Graph screen, then  $\text{F3}$  is **Trace**. In some cases, there will be additional choices for  $\text{F6}$ ,  $\text{F7}$ , or  $\text{F8}$ . These choices require two keystrokes, for example,  $\text{F6}$  is the second function of  $\text{F1}$ . In this book, these keys will be shown by key and by name such as  $\text{F1}$  **Tools**, or  $\text{2nd}$   $\text{F6}$  **Clean Up**.

In many cases pressing the function keys will display a toolbar menu. The choices can be accessed by typing the number or letter in front of the command or by highlighting the choice and pressing  $\text{ENTER}$ . For example, pressing **3** will get a **limit(** command from the menu shown here. In this book, this process will be shown as: Press  $\text{F3}$  **Calc** and select **3:limit(**. The down arrow symbol after item 8 indicates that there are additional commands not currently visible on the screen.

In some cases, a menu item may have an arrowhead at the right of the item. See the **MATH** menu pictured here. In this case, press  $\downarrow$  to display a submenu.



### CATALOG

Most of the TI-89 commands are also found in the CATALOG. Press **CATALOG**, and then press the key corresponding to the first letter of the command. For example, press **D** to move to commands that begin with *d*. (Do not press **alpha**.) Press **2nd** **⌵** to “page down” through the CATALOG. Notice that on-screen help is provided in the CATALOG. The appropriate parameters for that function are shown in the bottom line of the screen (the “status bar”). Parameters in [ ] are optional. This on-screen help is not shown in other menus. To use a command from the CATALOG, move the **⏏** indicator to the command and press **ENTER**.



### Basic editing

On the Home screen, you can use **⌵** and **⏏** to travel through the history area and highlight any command or result. Press **ENTER** to bring any command or result back to the entry line.

Press **⏏** or **⏏** to move the cursor when you are on the edit line. Press **2nd** **⏏** to move to the beginning of the line, and press **2nd** **⏏** to move to the end. The thin cursor is an insert cursor. Press **2nd** **INS** to change to a larger, overstrike cursor. Press **2nd** **INS** to toggle back and forth between these choices. Press **⏏** **DEL** or **⏏** to delete the character at the left of the cursor.

Press and hold **↑** and use **⏏** or **⏏** to highlight any part of the entry line. Use **F1** **Tools** for Copy and Paste commands.

