

## Managing Memory on the TI -83 Plus Graphing Calculator

```
ERR:MEMORY
0:Quit
2:Goto
```

Does this display to the left happen to you often? If you have a TI -83 Plus you have an option. The TI -83 Plus Graphing Calculator has an active memory (RAM) and storage memory (ARC). Archive is the transfer

function that allows you to move items, such as programs, from RAM to ARC memory. Programs such as Vernier's ChemBio or Physics, or TI's Ranger software, require a large portion of the RAM memory. Vernier's ChemBio or Physics can be loaded as applications (under **[APPS]**), which are stored in ARC memory. TI gives away and sells a number of applications too! See <http://education.ti.com> for more information.

To check the calculator's memory, press **[2<sup>nd</sup>] [MEM]** and then select **2: Mem Mgmt/Del...** A screen appears similar to the one below at the left. The two

```
RAM FREE    5692
ARC FREE    81212
0:All...
2:Real...
3:Complex...
4>List...
5:Matrix...
6:Y-Vars...
```

numbers at the top right of this screen are the bytes free in each area of memory.

```
0:Prgm...
8:Pic...
9:GDB...
0:String...
A:APPS...
B:APPVars...
```

Since programs are usually the most RAM memory consuming, archiving them can free up RAM memory. To archive programs, you cursor down to **7: Prgm...** as shown on the screen to the left and press **[ENTER]**.

Then, a screen with your program names will appear, such as the one given to the right below.

```
RAM FREE    5692
ARC FREE    81212
▶ ABTITR    873
*BONDS     71
DECAY     363
DISTA     472
*HCARB     70
*LOADTR    80
```

In this display, the cursor, ▶, is on ABTITR and if you press **[ENTER]** it will be archived. As you archive, the RAM FREE will increase. To unarchive a program, simply move the cursor to that program and press **[ENTER]**. Archived programs are indicated by the asterisk, such as \*BONDS. You can store data as named lists also. Use **[2<sup>nd</sup>] [QUIT]** to exit. If you go to **[PRGM]** and select an archived program (\* precedes name in the list of programs), it will not function and ERR: ARCHIVED appears. You would then need to unarchive the program to run it. For application (under **[APPS]**, stored in ARC memory), they are always available.

Transferring programs via the TI -graph link software and cable to a computer is another way to free up memory and have a backup!

To delete unwanted programs, move the cursor to that program and press **[DEL]**. You will be prompted "Are you sure?" with the NO selected and you will need to select YES.

### Updating your operating system

Press **[2<sup>nd</sup>] [MEM]** and select **1: About** to view which version of the operating system is on your calculator. A screen similar to the one below appears. The second line is the version (in this case 1.16, which is the latest available).

Download free operating system updates and instructions from <http://education.ti.com>. If you have early versions of the operating system (older TI -83 Plus calculators), updating is a good move. Your calculator will run faster!

