Appendix A: Anti-tips - things that can't be done

This section lists some things that you may want to do, or might think you should be able to do, but the TI-89 / TI-92 Plus or TI Basic do not support. This section might save you some time in finding out that you can't implement a particular feature.

- 1. Your programs cannot, in general, use the text editor or matrix editor but see tip [7.10].
- 2. You cannot write to a text variable.
- 3. Many built-in functions, for example, *nSolve()* and *NewPlot*, won't accept local variables as arguments. Use global variables, and delete them with *DelVar* when your program exits.
- 4. The TI-89 / TI-92 Plus do not have built-in functions to create cascading drop-down menus, as used, for example, on the home screen toolbar items. However, the program *MnuPak* (http://www.calc.org/programs/proginfo.php?id=2716) can be used to do this.
- 5. Variables cannot be larger than about 64K. Trying to create or use a variable larger then this will cause a memory error, and subsequent memory leakage, in which the available RAM mysteriously decreases. The only known fix is a reset.
- 6. A program cannot archive itself. However, one program can archive and unarchive another.
- 7. Functions can read from global variables, but cannot store to (write to) global variables. Programs can read and write to global variables. Functions *can* write to their argument variables, which are considered local variables.
- 8. Functions cannot write to the program I/O display.
- 9. Programs cannot, in general, return results to the history area, but see tip [7.8].
- 10. You cannot reference single-row or single-column matrices (vectors) with a single index. Example: *matrix*[3] won't work. This works: *matrix*[3,1].
- 11. You cannot use just *ans()* in a function. The TI Basic tokenizer will replace *ans(1)* with the actual value of *ans(1)* the first time the program runs. Instead, use *expr("ans(1)")*. See tip [9.10] for an example. This behavior can also be avoided by archiving the function before running it. *entry()* exhibits the same behavior.
- 12. You cannot delete statistics plot definitions within a program or function. There is no command to do this. However, see tip [4.15] for a possible work-around.
- 13. You cannot directly write to data variable elements. See tip [3.8] for a workaround.
- 14. Number base conversions (►Hex, ►Dec, ►Bin) only work in Auto or Exact modes. In Approximate modes, the base conversions return a *Domain error* message. Keep this in mind if you write programs that use the number base conversions.
- 15. You must use global variables, not local variables, to do symbolic math in programs. This is in the 89/92+ Guidebook, page 291.
- 16. You cannot archive variables beginning with the underscore character '_'. The operating system considers these to be system variables and prevents the archive. The underscore character is typically used to define custom user units.
- 17. You cannot pass Data variables as program or function arguments. If this is necessary, convert the data variable to a matrix (if all the columns have the same number of rows), and pass the matrix. See tip [3.29] for details.
- 18. You cannot use elements of lists or matrices as arguments in the *Request* command. To accomplish this, first store the element to a variable, use the variable in *Request*, then store the variable to the element.