

# QuadForm Math OS 5

## Introducing the qfX system

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 with help from Jude C. Nelson

### 1. Introduction

QuadForm Math OS 5 is the next generation math program for the TI-89, TI-92 Plus and Voyage 200 PLT. The newest edition of this program adds great expansion abilities, fixes several display inconsistencies, adds several program modules, and makes this program smaller.

This program uses the new qfX system, developed by Frank A. Nothaft, to install 3rd-party extensions (modules) into the math OS. These extensions are easily written and can provide many services not in the program, or build upon the program's abilities and turn it into a complete OS. These extensions are simply inputted into the math OS through a very simple process, done through the "Add/Remove Extension" module. These programs are instantly available from inside the math OS as modules. After you add these in the module, you can just go and use them as you would use any other modules. (See notes about writing extensions)



As said above, this program is smaller than the previous edition of QuadForm, QuadForm Math OS 4. QuadForm Math OS 4 was ~19 KB, while QuadForm Math OS 5 (even with the extension system) is just ~16 KB.

### 2. License & Warranty

The end user of this program may use this program for free for an unlimited time period. They may distribute copies of this program as is, but must give credit to Homeless G Productions. You may not edit this program or use code from it in another program without first contacting Homeless G Productions. Homeless G Productions reserves all rights to terminate the license of any user who violates it. If your license is removed, you may not use, distribute, or write extensions for this or future versions of this program. Homeless G Productions takes no responsibility or liability for damages or loss of data caused by this program.

### 3. Known Incompatibilities

There are no known bugs or incompatibilities in this software. If you find one, contact Homeless G Productions with a detailed statement that states the error returned, what you were doing, and any possible programs on your calculator that could have interfered with this program.

### 4. System Utilities Information

System Utilities is © 2000 MurBeck, used with their permission.

### 5. QuadForm Math OS 5 Information

QuadForm Math OS 5 is © 2003 Homeless G Productions.

The qfX System is © 2003 Homeless G Productions.

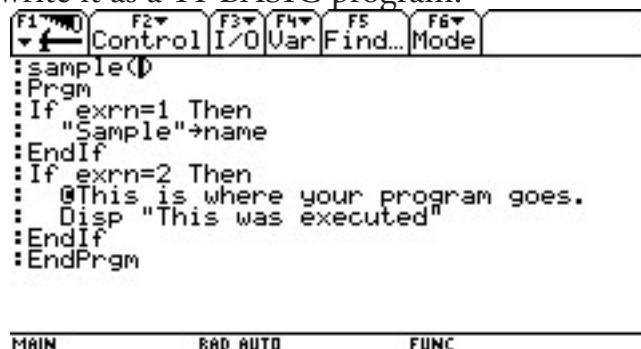
Jude C. Nelson helped beta test the TI-89 version of the program and edited it for possible display bugs.

Omar Bohsali helped with some of the ideas in this program.

The TI-BASIC code for this program and the qfX system was written wholly by Frank A. Nothaft.

### 6. qfX System

The qfX System codec used is qfX System Public Beta 1 (version number 0.1). As of now, the qfX system codec is very simple, but may increase in complexity in further revisions. No SDK is available yet, so for now you must write it as a TI-BASIC program.



The image shows a TI-BASIC program editor window. The top menu bar includes F1 (Control), F2 (I/O), F3 (Var), F4 (Find...), and F5 (Mode). The program code is as follows:

```
:sample(
:Prgm
:If exrn=1 Then
:  "Sample"→name
:EndIf
:If exrn=2 Then
:  @This is where your program goes.
:  Disp "This was executed"
:EndIf
:EndPrgm
```

Below the code, there is a status bar with three indicators: MAIN, RAD AUTO, and FUNC.

In this program, there are two sections, the initialization section and the execution section. The initialization section initializes the name of the program, and is triggered by a variable “exrn” being equal to the numeral 1. The execution section is triggered by the variable “exrn” being equal to the numeral 2. The execution section includes all the code used by your extension when it is run as a module. It is not recommended to use variables from the math OS, as they are dependent on the settings of an end user’s calculator and may be inconsistent.

### 7. qfX System Developer License

This license gives you permission to write unlimited extensions for the qfX System. You may decide the licensing, warranty, and availability for your extensions. This license may be removed if you violate any copyrights or trademarks, produce illegal content, or produce content deemed offensive by Homeless G Productions.