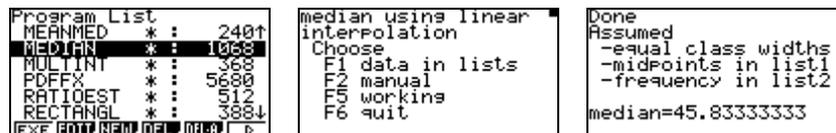# fxNEWS
Support for all Casio fx-9860G models
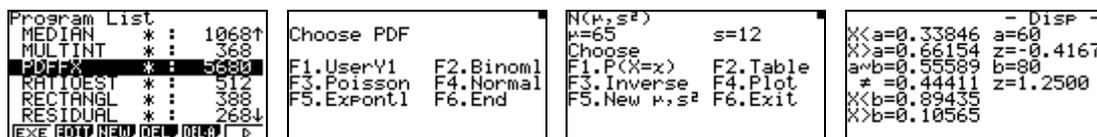
Programs

This fourth edition of fxNews contains 19 new programs in file **PROG06V4.g1m**.

NEW! As first explained in the second edition, fxNews programs are now all **password protected** (password is *FXNEWS*) in order to help prevent accidental corruption of the program code. When users press AC then EXIT to break out of program execution, the fx-9860G immediately enters program edit mode and it is easy to add or delete code before the user realizes what is going on! Password protection prevents this from happening.
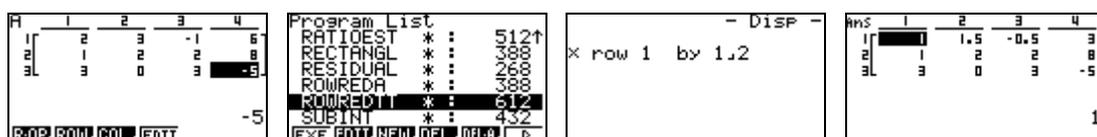
Programs are designed to enhance the capability of the fx-9860G graphics calculator. Some programs are simply utilities to speed students through their tests ands exams. The program MEDIAN comes to mind here. MEDIAN calculates the proportional median from a grouped frequency table using linear interpolation. Data can either be in Lists 1 & 2 or simply enter in required values.
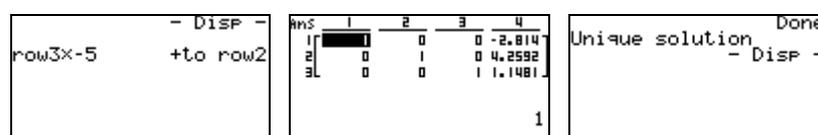

Another group simply help with common mathematical needs such as calculations for discrete and continuous probability distributions. PDFFX is an example.

Other programs set out to help the learning process, often taking the tedium out of repetitive calculations and keeping the focus on the bigger picture. ROWREDTT is an example here, used to illustrate the steps in the row reduction process used in reducing a matrix (stored in Mat A) to echelon form.

... and several row operations later ...

fxNEWS

Support for all Casio fx-9860G models

Below is a brief description of each of the 19 programs in file **PROG06V4.g1m**.

Name	Description
ADDINT	Addition practice using integers from -9 to 9 with the aid of a number line.
ANGLEST	Estimation practice of the size of angles from 0 to 180 degrees, with visual feedback.
CRITPTS	Transforms any number of critical points of $y=f(x)$ using $y=cf(bx+a)+d$, displaying original and transformed points.
FORMULA	Practice in working out the coefficients a and b for $y=ax+b$ from a table of values.
FRACEST	Estimation practice of one length as a fraction of another.
GAUSELIM	Gaussian elimination of matrix A, result in matrix R, showing steps.
GRAFORM	Practice in working out a and b for $y=ax+b$ from a graph.
LINPRG	Solves linear programming problems. Enter inequalities, objective function and program does the rest using the simplex method. Optimal value is always OK, but the program does not always return the correct coordinates -always check!
MEANEST	Practice estimating the mean of a set of numbers. You choose how many numbers and their range.
MEANMED	Little utility to calculate mean and median without entering data in STAT mode.
MEDIAN	Finds the median from a grouped frequency table using linear interpolation. Data can either be in Lists 1 & 2 or simply enter in required values.
MULTINT	Multiplication practice with integers from -9 to 9 with visual aid of a rectangle.
PDFFX	Five probability distributions in one quick program. Calculate, tabulate and plot any normal, exponential, Binomial, Poisson or user defined (any pdf entered in Y1) probabilities.
RATIOEST	Estimation practice of one length as a ratio of another.
RECTANGL	Enter perimeter and area of a rectangle and this utility returns the width and height (if possible) of the rectangle.
RESIDUAL	Check your regression model with this small utility which calculates and plots residuals based on regression of List 2 (y) on List 1 (x).
ROWREDA	Reduces matrix A to echelon form, storing result in matrix R and indicating type of solution.
ROWREDTT	As for ROWREDA but also shows steps in reduction. (Though rarely shows a neat path to the reduction!)
SUBINT	Subtraction practice with integers from -9 to 9 with a number line as a visual aid.