



fx-7400G

The Equation Machine

Solving Equations
Patterns
Problem Solving

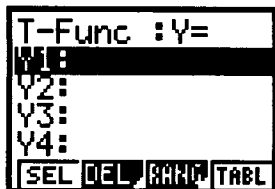
How to Delete an Equation from the TABLE Menu

Highlight the equation to delete.

Press F2 (DEL)
F1 (YES)

How to Enter an Equation in the TABLE Menu

Enter the Table Menu.
The T-Func screen is shown below.



While Y1 is highlighted:

Press 2
X,T key
- key
1

EXE (stores the equation)

Please remember that X is the X,T key directly below the red Alpha key. You cannot use your multiplication key for X. Your screen should be similar to the one below.



Standards: Problem Solving, Communication, Number Relationships, Estimation, Patterns and Functions, and Algebra.

Materials: fx-7400G

Calculator Use: RUN and TABLE Menus, x^2 and \wedge keys.

The Equation Machine is a 2 player game. Player 1 uses X and Y to create an equation which is not reveal to Player 2. This equation must be set equal to Y. Player 1 enters the equation into the Table Menu on the fx-7400G, deleting any existing equations.

Rules

Without allowing Player 2 to view the calculator, Player 1 enters the equation $Y = 2X - 1$ in Y1 on the fx-7400G and sets the range for Xs in the table of values. For this game, the range for X should start at -10 and end 10 increasing by increments (pitch) of 1. To enter the range for X, perform the following:

Press F3 (RANG).
Highlight Strt.
Press -10
EXE
Highlight End.
Press 10
EXE
Highlight ptch.
Press 1
EXE
QUIT
Press F4 (TABL).

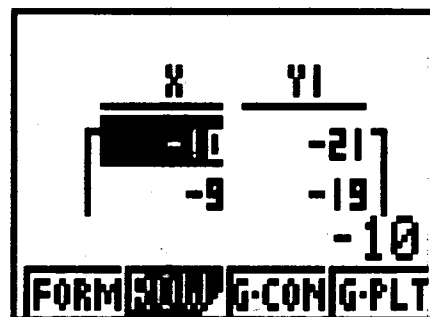


Figure 1

Figure 1 shows the initial screen that Player 2 will see.

Player 1 passes the calculator to Player 2 who is to determine the equation devised by Player 1. Player 2 may use the arrow keys to scroll up and down the screen, but Player 2 cannot leave this window. Player 2 gets 3 guesses at the equation.

Scoring

A player is awarded 3 points for correctly determining the equation on the first guess, 2 points for correctly determining the equation on the second guess, and 1 point for correctly determining the equation on the third guess. The player supplying the equation receives 4 points if the other player does not correctly guess the equation in the 3 guesses.

The Equation Machine

How to Create a Table of Values

Enter the function $Y = 2X - 1$ in the TABLE Menu for Y1 and set the range for X between -10 and 10 with increments of 1.

Press F3 (RANG).

Highlight Strt.

Press -10

EXE

Highlight End.

Press 10

EXE

Highlight ptch.

Press 1

EXE

QUIT

Press F4 (TABL). The resulting Table is shown below.

X	Y1
-10	-21
-9	-19
	-17
	-15
	-13
	-11
	-9
	-7
	-5
	-3
	-1
	1
	3
	5
	7
	9
	11
	13
	15
	17
	19
	21

FORM|SOLV|G-COM|G-PLT

Use the down arrow key to view the remaining values in the table.

Highlight 9 in the X column.

Press 15.5

EXE

Notice that the corresponding Y value changed as well as shown below.

X	Y1
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