

Program - Quadratic Quadratic Formula Calculator

1) Press Program Button
Choose Create New



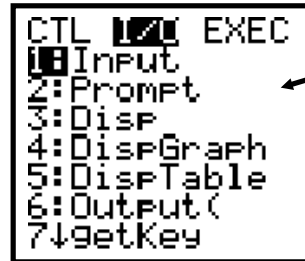
2) Name your Program.
Max letters: 8



3) Pushing the Program Button again brings you to the following menus:



These are for advanced programming.



These are the commands we are going to choose from. I/O stands for Input/Output.

8: ClrHome

PROGRAM: QUADRATC

```

:ClrHome
:Disp "GIVEN AX²
+BX+C"
:Disp "ENTER A"
:Input A
:Disp "ENTER B"
:Input B
:Disp "ENTER C"
:Input C
:ClrHome
:(-B+√(B²-4AC))/
(2A)→R
:(-B-√(B²-4AC))/
(2A)→S
:Disp "ANSWERS A
RE"
:Disp R
:Disp S
    
```

← ClrHome starts the program with a clean screen. It is 8 under I/O.

← Disp command tells the calculator to print something to the screen. Anything in quotes will show up as typed. Don't make any long sentences, however.

← The Input command causes the program to pause until the user enters some information. The information is stored to the letter in the calculator's memory. We are entering values into A, B, and C to calculate the Quadratic Formula.

← This is the heart of the program. It calculates the values of the roots. There are two solutions, one calculated with the +, the other with the -. The most common mistakes are made here. The negative in front of B must be the negative button, not the subtraction button. There must be parentheses around the entire numerator and the entire denominator. The arrows are from the store button. The answers are stored to R and S.

← The last two Disp commands don't have quotation marks, so it displays the values stored to R and S instead of the actual letters.

To exit the program editor, press 2nd Quit. To run the program, press program, under EXEC choose QUADRATC. Press Enter. When it shows prgmQUADRATC, press enter again. Follow the on-screen instructions. Use A=1, B=5, C=6. The answers should be {-2, -3}.

If there are errors, press GOTO and it will take you to the problem commands in the program. Make sure it is copied EXACTLY as it is typed here. Some nice additions: Put the Change to Fraction after R and S and any rational solutions will be shown as such. If the MODE is a+bi, it will display imaginary answers.

