

Casio fx-9750GII Calculator: Data Regression Calculator Steps

* Note: Before starting ANY type of regression problem – Please know how to RESET your calculator!

**F5****F2****F1****EXIT**

Step 1: Put Data In Calculator →

**EXE**

then enter data in List 1 (L1 – x's) and List 2 (L2 – y's)

Step 2: To see Data (Scatter Plot) on Graph Screen →

F1

(for GRPH) , then

F1

(for GRPH 1)

Step 3: Find (Calculating) Regression Equation →

F1

(for Calc) , then determine which type of equation:

- | | |
|---------------------------------------|---|
| 1.) Linear ($x \rightarrow ax + b$) | 5.) Log ($a + b \ln x$) |
| 2.) Quadratic (x^2) | 6.) Exponential (ae^{bx} or ab^x) |
| 3.) Cubic (x^3) | 7.) Power (ax^b) |
| 4.) Quartic (x^4) | 8.) Sine ($a \sin (bx + c) + d$) |

Step 4: Put Regression Equation in Calculator →

- 1.) To put/use the equation – COPY the equation first by selecting **F5** **EXE** ,
this will copy that equation (with all of its numbers and in the correct format) into Y1 to use later...
- 2.) To see how the equation fits with the data – DRAW by selecting **F6** **EXE** ,
if this model is a GOOD FIT, the drawn equation and your data points should be very close to each other.
You can also determine if the equation is a good fit based on its correlation coefficient (r or (sometimes r^2)).

Step 5: To Answer Questions Using the Regression Equation →

**EXE****EXE****F6****F5**

- 1.) To find a Y-value when given X-value – Press **F6** then **F1** (for Y-Cal) , enter in a x-value
(If get an “Argument ERROR, then graph needs to be zoomed out for the calculator to “see” and calculator it)
- 2.) To find a X-value when given Y-value – Press **F6** then **F2** (for X-Cal) , enter in a y-value
(If get an “Argument ERROR, then graph needs to be zoomed out for the calculator to “see” and calculator it)