TI Calculator Tips for Regression

TI83/84 (this assumes the explanatory variable is input to L1 and the response variable to L2)
[Do once and/or after memory reset: 2nd, 0 (Catalog), x^{-1} (alpha D), down arrow to select DiagnosticOn, ENTER, ENTER. You should see DiagnosticOn   Done on your screen.]
Now for correlation: STAT, arrow to CALC, choose 8:LinReg(a+bx), 2nd, 1 (L1) "," 2nd, 2 (L2),**VARS, arrow to Y-Vars, ENTER to select 1:Function, ENTER to select Y_1 [screen should look like: LinReg(a+bx) L_1,L_2,Y_1], ENTER**
The output will look the same as before. **Now press Y=, GRAPH** (assuming you have graphed the scatterplot before) <u>to add the regression line to the scatterplot</u>.
<u>To graph the residuals</u> (which the TI83/84 stores automatically): **2nd, Y=, ENTER to define Plot1, select the 1st graph type (scatterplot), Xlist: L1, Ylist: press 2nd, STAT, ENTER to select RESID, Mark: +, ZOOM,9.**

TI89 (this assumes the explanatory variable is input to list1 and the response variable to list2)
From the Statistics Editor, press F4 (Calc), arrow down to 3:Regressions, press right arrow, select 1:LinReg(a+bx), ENTER, X List: list1 [2nd,- (VAR-LINK select list1 ENTER)], Y List: list2, Store RegEqn to: y1(x), Freq: 1, ENTER.
The output will look the same as before. **Now press ♦, F1, Y=, ♦, F3, GRAPH** (assuming you have graphed the scatterplot before) <u>to add the regression line to the scatterplot</u>.
<u>To graph the residuals</u> (which the TI89 stores automatically): **from the plot definitions screen, F2, ENTER, F1 to define plot 1, Plot Type: Scatter, Mark: Cross, x: list1, y: VAR-LINK** arrow down until you find the **resid** list in the **Statvars** section, **ENTER, F5**