PreCalculus Chapter 8 Calculator Help

Make a table of values:

Press STAT → ENTER and put values into the desired list.

Run a linear regression on values in L_1 and L_2

Press STAT and use ▶ to select CALC. Scroll down to LinReg (ax + b)

(Same steps for Exponential, Power, Quadratic, Logarithmic and Logistic)

Make r and r^2 appear when running linear regression

Press 2nd → 0 (catalog) → scroll down to Diagnostic On → ENTER

Place regression equation (from above steps) into Y_1

(Make sure you have run the linear regression before completing these steps)

Press Y= → VARS → 5 and use ▶ to select EQ and press ENTER
(The equation should show up in Y_1)

Make list of residuals

(Make sure L_1 and L_2 have the x and y coordinates in them and regression equation is in Y_1)
Press STAT → ENTER and scroll over to an empty list.
Enter $(L_2 - Y_1(L_1))$ in the empty list

(**Y_1 : Press VARS → ▶ → ENTER (twice))

Make a list of deviations

(Make sure L_1 and L_2 have the x and y coordinates in them; calculate value of $\overline{y}$)
Press STAT → ENTER and scroll over to an empty list.
Enter: $(L_2 - \overline{y})$ in the empty list

Find Mean or Sum

2nd → STAT → ▶ (3 times), chose mean or sum, then select the desired list

Plot data points (from L_1 and L_2) on graph

Press 2nd → Y= → ENTER and select ON

(**Press ZOOM → 9 for nice window)

Make a Residual Plot

(Make sure L_1 contains the x-values and L_3 contains the "y-hat"-values)

2nd → Y= → ENTER and change the Y-List to L_3

- Turn the plot on
- Press ZOOM → 9 for nice window