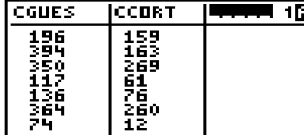
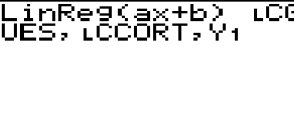
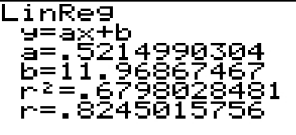
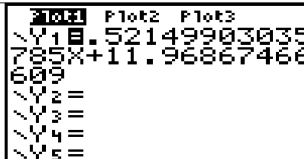

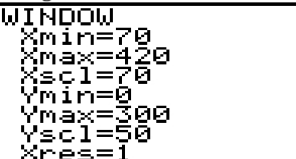



How to make Regression Line Scatterplots and Residual Plots on the Calculator

For the following examples we will use the following data. A food industry group asked 3368 people to guess the number of calories in each of several common foods. Here is a table of the average of their guesses and the correct number of calories:

Food	Gussed Calories	Correct Calories
8 oz whole milk	196	159
5 oz spaghetti with tomato sauce	394	163
5 oz macaroni and cheese	350	269
One slice of wheat bread	117	61
One slice of white bread	136	76
2 oz candy bar	364	260
Saltine cracker	74	12
Medium-size apple	107	80
Medium-size potato	160	88
Cream-filled snack cake	419	160

Making a scatterplot with the LinReg line going through it:

		
<p>1) Begin by entering the data into the calculator.</p>	<p>2) Call up the LinReg command on the home screen (STAT->CALC->4), call up the two lists, then add Y1 (VARS->Y-VARS->FUNCTION->1) to the end. This will put the LinReg equation right into Y1 for you.</p>	<p>3) Here's the LinReg info. Not only is the equation in Y1 now, but the calculator has also created a list named RESID which has all of the residuals you need. The RESID list changes each time LinReg is run.</p>
		
<p>4) See! The equation is in Y= ! It even has more decimal places of accuracy.</p>	<p>5) Set up a StatPlot to make a scatterplot with your data lists.</p>	<p>6) Set up a good WINDOW. Remember, take (max-min)/5 to get good Scl numbers, then find multiples of your Scl that are just below and just above the min and max of your data for the min's and max's. This WINDOW works well.</p>
	<p>7) Hit GRAPH and you have your scatterplot with the LinReg line passing through. It is now ready for saving and analysis!</p> <p>Don't forget to write down your WINDOW so you can # your axes!!</p>	