Paired Data t-Test

| L1	L2	L3	2
91	87		
99	91		
87	84		
85	83		
83	84		
79	76		

L2(11) =

Enter the data you're given into **L1** and **L2**. (Make sure you have equal numbers of data in the lists.)

L₁–L₂→L₃
{0 4 4 1 4 8 3 …

Since we're interested in the *differences* between the lists, create a third list, **L3**, by subtracting **L1** and **L2** and using the **STO>** button.

Now…perform a 1-sample t-Test and a 1-sample t-Interval as before! ☺

Plot1 Plot2 Plot3
On Off
Type: (graph icons)
Xlist:L₃
Freq:1
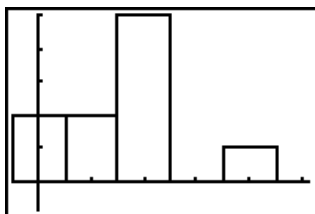
Don't forget to check the Nearly Normal condition – unimodal and roughly symmetric.

Under **STAT**, **TESTS**, choose **2:T-Test**.

T-Test
Inpt:**Data** Stats
μ₀:0
List:L₃
Freq:1
μ:≠μ₀ <μ₀ **>μ₀**
Calculate Draw

Tell the calculator you want to use the stored **Data**. Set the mu value to 0, indicate where the data are (**L3**), select the **Frequency**, choose the appropriate tail, and **Calculate**.

T-Test
μ>0
t=3.5
p=.0033617578
x̄=2.8
Sx=2.529822128
n=10

The *t* and the p-value magically appear! ☺

TInterval
(.99027,4.6097)
x̄=2.8
Sx=2.529822128
n=10

Now get the confidence interval using **STAT**, **TESTS**, **8:TInterval**.