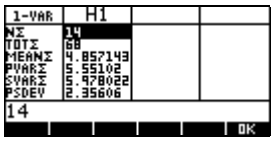
Tips and Tricks: Retrieving Statistical Values

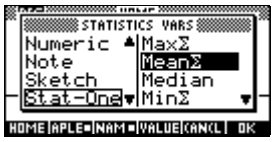
Once a set of statistics has been calculated in the **NUM** view of the **Statistics** aplet, the user may want to retrieve some of those values in the **HOME** view. For example, suppose you suspect that the value of 27 should actually be 2, 7 in the data set below. We can check for an outlier by testing to see whether it lies in the range $\bar{x} \mp 3\sigma$.

{2, 2, 3, 5, 4, 6, 7, 3, 9, 27, 3, 5, 10, 5, 4}

Entering the data (without the 27) and pressing **STATS** gives the following:



We can now retrieve the values of the mean and population standard deviation in **HOME** using the **VAR** button. Press **VAR**, then **APLET (SK2)**, scroll down to **Stat-One** and then retrieve **MeanΣ**. Use the same technique to retrieve the value of **PSDev**. If you prefer, you can simply use the **A..Z** buttons and the **CHARS** menu to enter the variable names instead of retrieving them from the **VAR** menu.



As you can see from the screen shot of the **HOME** view shown right, the value of 27 is definitely not in the range required and so is probably an outlier.

The summary statistics of bivariate data can be retrieved in the same manner. In addition to this you can paste the equation of the fit curve into the **Function** aplet using the technique shown below. To convert **PREDY(X)** into the fit equation, just highlight it and press **EVAL (SK6)**.