## (X,N) List Statistics Worksheet



This worksheet allows to perform basic statistical calculations over a previously created list, which is in the form of : value and frequency ( a "(X,N) List").

[ 🚞 List ▶]	Opens a menu to Statistics action menu.
🖿 New	Opens the "(X,N) List Editor" to create a new list.
🍃 Edit	Opens the "(X,N) List Editor" to edit the current list.
> Load	Shows a menu to load an existing "X,N List".
[ Two-Variables Statistics ]	Shows the " <b>Two-Variables Statistics</b> " worksheet to perform statistics calculations with two "(X,N) List".
[ Curve Fitting ]	Shows the <b>"Two (X,N) Lists Curve Fitting</b> " worksheet to perform regressions and forecasting calculations with two <b>"(X,N) List</b> ".
[ <b>∑</b> Frq. ]	Calculates the sum of frequencies ( 'N' column ) in the current list.
[Size]	Calculates the the number of entries in the current list.
[ Min. ]	Calculates the Minimum value of the current list.
[ Max. ]	Calculates the Maximum value of the current list.
[ Range ]	Calculates the difference Max. Minus Min. value in the current list.
[ Total ]	Calculates the Total sum of the current list.
[ Mean ]	Calculates the arithmetic Mean of the current list.
[s]	Calculates the Standard Deviation of the current list.
[σ]	Calculates the Population standard deviation.
[ Median ]	Calculates the Median of the current list.

## Example:

Suppose your phone bills during the past six months are: \$340, \$175, \$450, \$780, \$245 and \$625. Calculate the mean, median, standard deviation and Total of the monthly phone bills. Also, what is the lowest, the highest and the range ?.

## Solution:

First, follow the next sequence to create the "Phone Bills" list:

Keys	Comment
[ 📫 List 🕨 ] 🖿 New	Show the "(X,N) List Editor" to create the list.
[ Add ] 340 [ Enter ]	Enters the bill #1 in the list.
[ Add ] 175 [ Enter ]	Enters the bill #2 in the list.
[ Add ] 450 [ Enter ]	Enters the bill #3 in the list.
[ Add ] 780 [ Enter ]	Enters the bill #4 in the list.
[ Add ] 245 [ Enter ]	Enters the bill #5 in the list.
[ Add ] 625 [ Enter ]	Enters the bill #6 in the list.
[ 🚞 List ► ] 📝 Name…	Shows a Name entry form to name the list.
Type "Phone Bills" and [ Done ]	Name the list "Phone Bills"
[ Save ]	Save the list and close the editor

Once the list is created and you are back to the "(X,N) List Statistics" worksheet, follow the next sequence to answers all the questions:

(If the "Phone Bills" list is not loaded, touch the [**iii** List ▶] menu button, select the "> Load" submenu and touch the "**Phone Bills**" item)

Keys	Comment
[ Mean ]	Calculates the mean of the bills. Mean = 435.83
[ Median ]	Calculates the median of the bills. Median = 395.00
[s]	Calculates the standard deviation. $s = 231.55$

Keys	Comment
[ Total ]	Calculates the total of the bills. Total = 2,615.00
[ Min. ]	Calculates the lowest bills. Min = 175.00
[ Max. ]	Calculates the highest bills. Max = 780.0
[ Range ]	Calculates the Range of the bills. Range = 605.00