


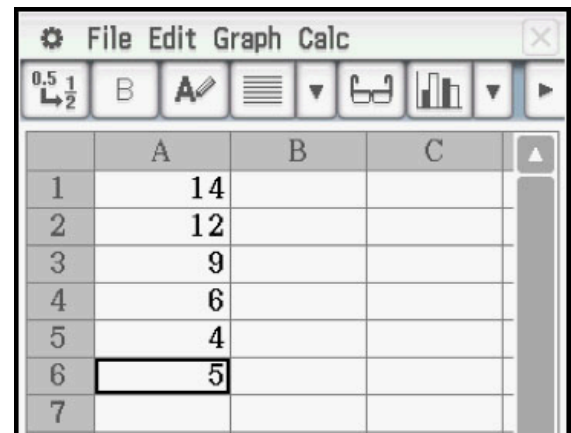
# Statistics Menu




Suppose one of the questions asked on a survey was “What type of pet do you have?”, and the results from 50 people are shown in this table.

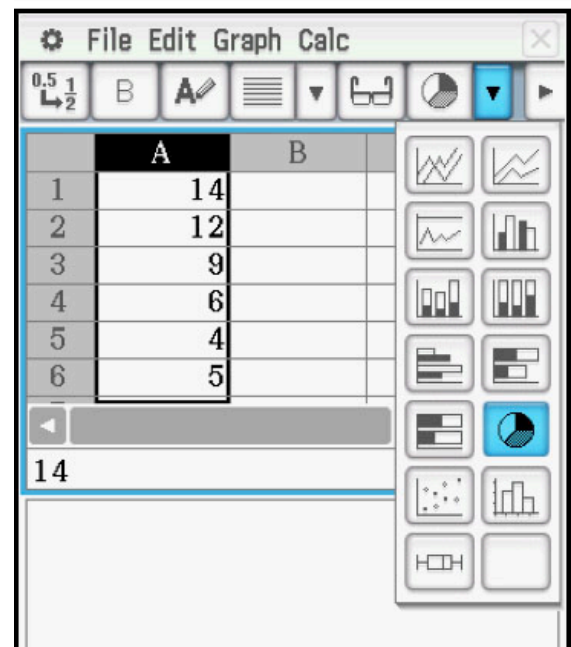
Pet Category	Dog	Cat	Fish	Bird	Other	None
Frequency	14	12	9	6	4	5

1. Construct a pie chart of these data.

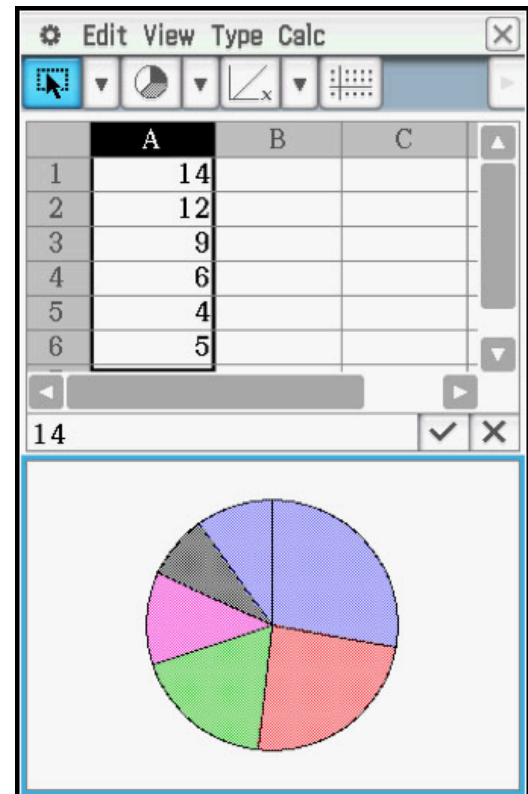
It is easiest to work with categorical data from a spreadsheet. Tap , then the Spreadsheet icon. Enter the frequencies in the first column. Press **EXE** to move to the next cell.



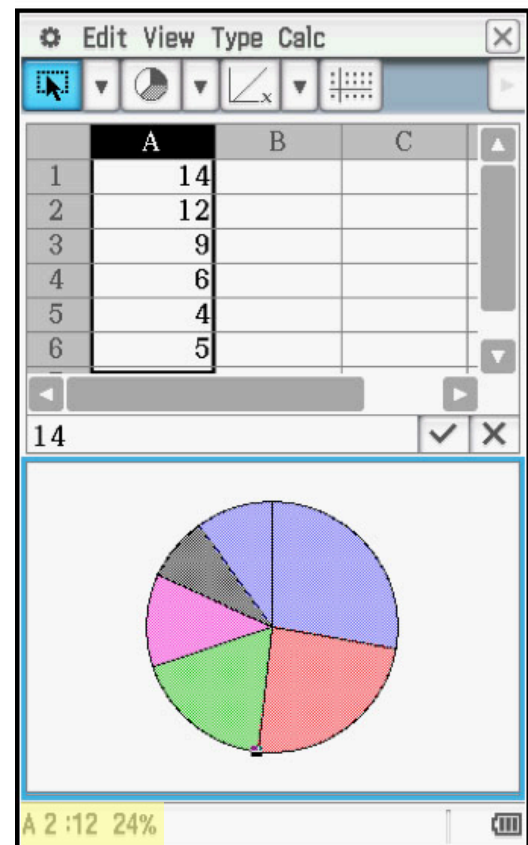
To construct the chart, tap **Column A** so it is selected. If the graph icon is , tap it. Otherwise tap the  near the top-right to open the graph menu and then tap  from the drop down list.



# Statistics Menu

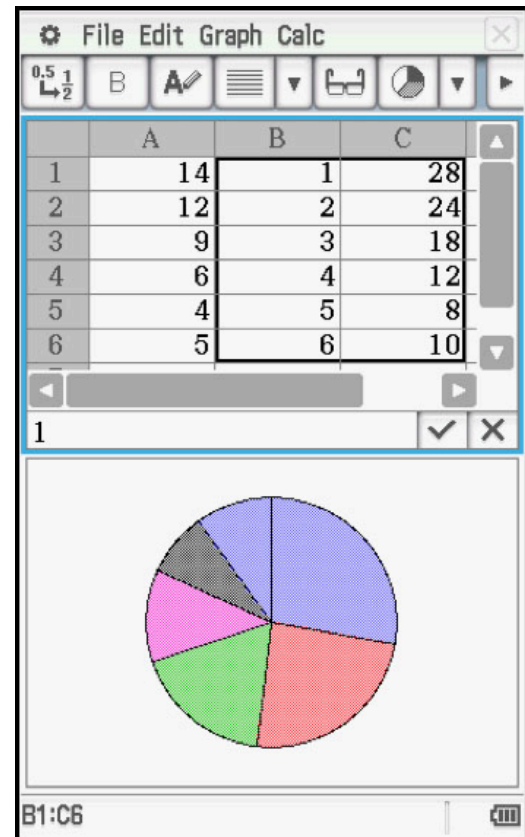


Tap any section of the chart to display the frequency.



# Statistics Menu

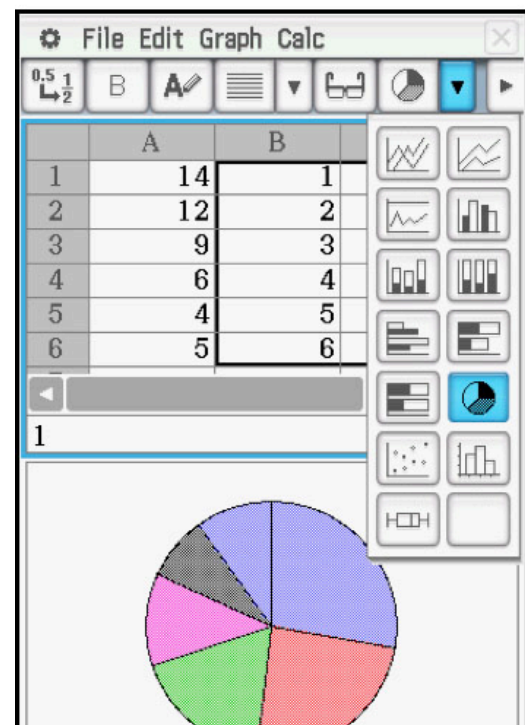
Tap the chart and drag to **Cell B1** to display the relative frequencies, shown as percents. (tap-and-drag is similar to click-and-drag with a mouse.)



2. Construct a bar chart for these data.

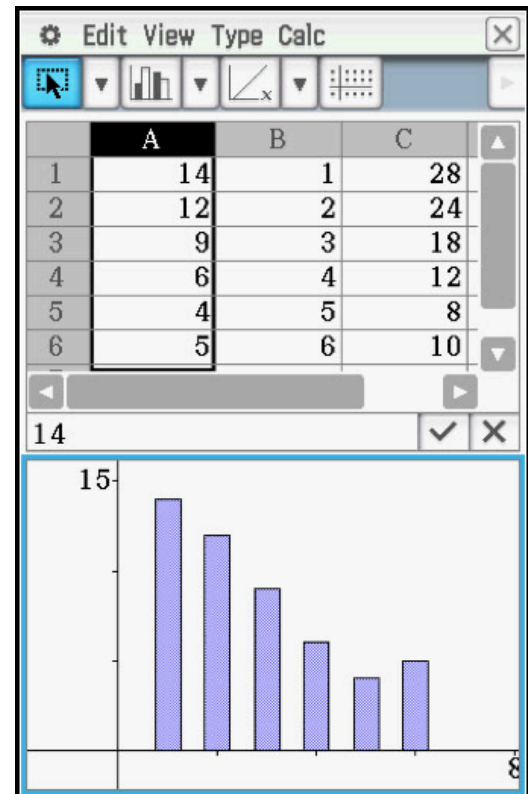
Select **Column A** again. Tap the ☐ near the upper-right corner to access the graph drop down menu.

Then tap  to construct a bar chart.

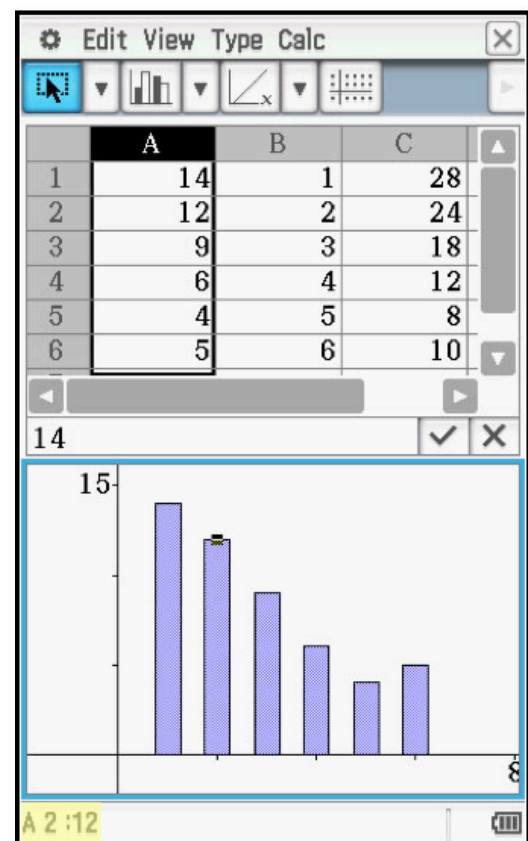


# Statistics Menu

The bar graph is displayed.



Tap any bar to display the frequency.




# Statistics Menu

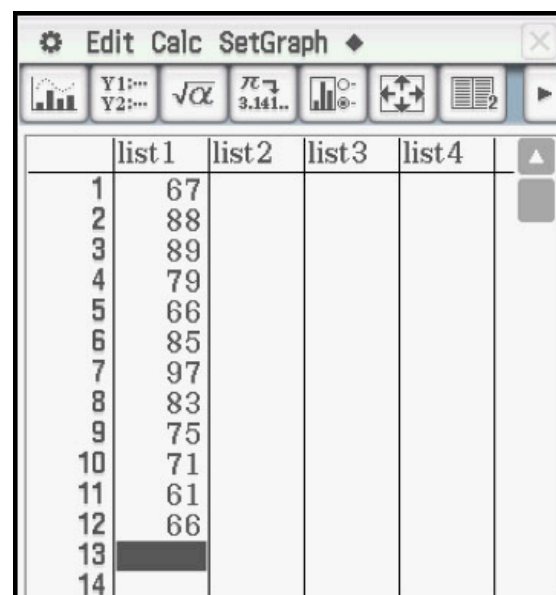
Plots and statistics for quantitative data can be created in either the spreadsheet or statistics menu. The statistics menu will be used for this example.

The number of games won (out of 162) by a certain baseball team for the years 2002 – 2013 are shown in the table.


67	88	89	79	66	85
97	83	75	71	61	66

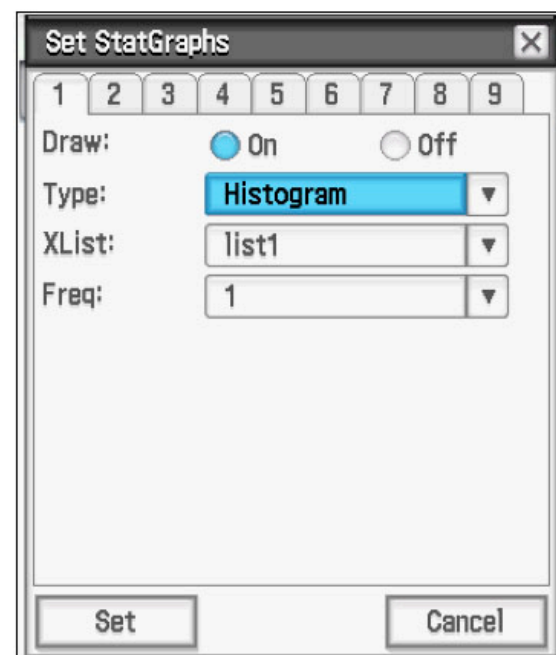
1. Construct a histogram for these data.

Tap , then the Statistics icon. Enter the frequencies in **list1**. Press **EXE** to move to the next value.



	list1	list2	list3	list4
1	67			
2	88			
3	89			
4	79			
5	66			
6	85			
7	97			
8	83			
9	75			
10	71			
11	61			
12	66			
13				
14				

Tap  to setup the plot. Select **On**, and use the drop down menus to select **Histogram**, **list1**, and 1 as shown. Then tap **Set**.



Set StatGraphs

1 2 3 4 5 6 7 8 9

Draw: ☒ On ☐ Off


Type: **Histogram**

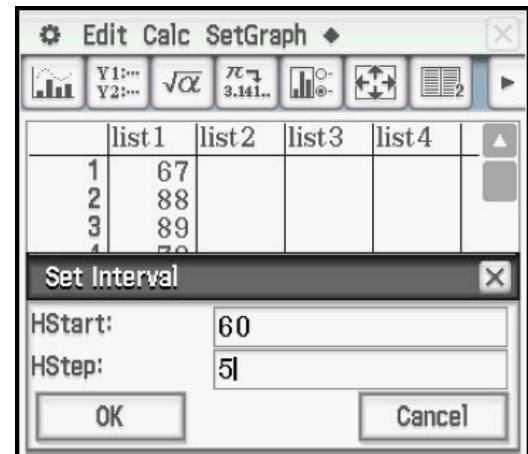
XList: list1

Freq: 1

Set Cancel

# Statistics Menu

Tap . Enter values for the starting value (**HStart**) and the step (**Hstep**), the width of each bin; then tap **OK**.



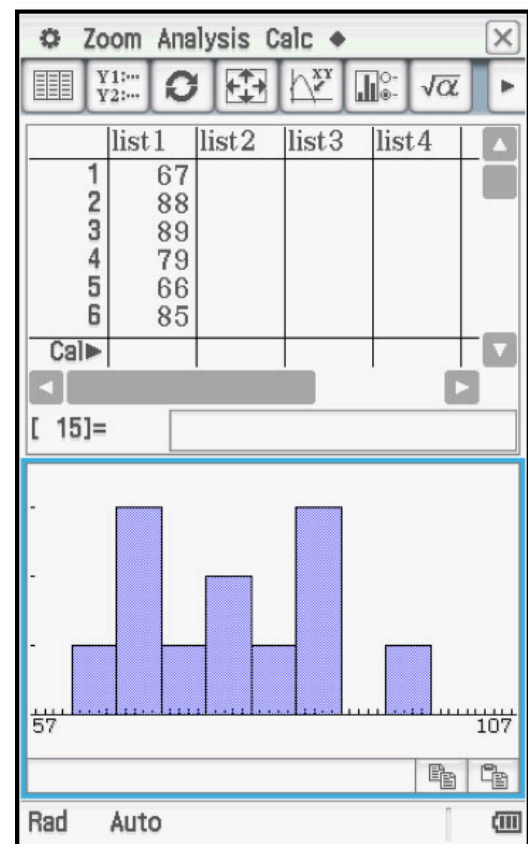
	list1	list2	list3	list4
1	67			
2	88			
3	89			
4	79			

**Set Interval**

HStart: 60

HStep: 5

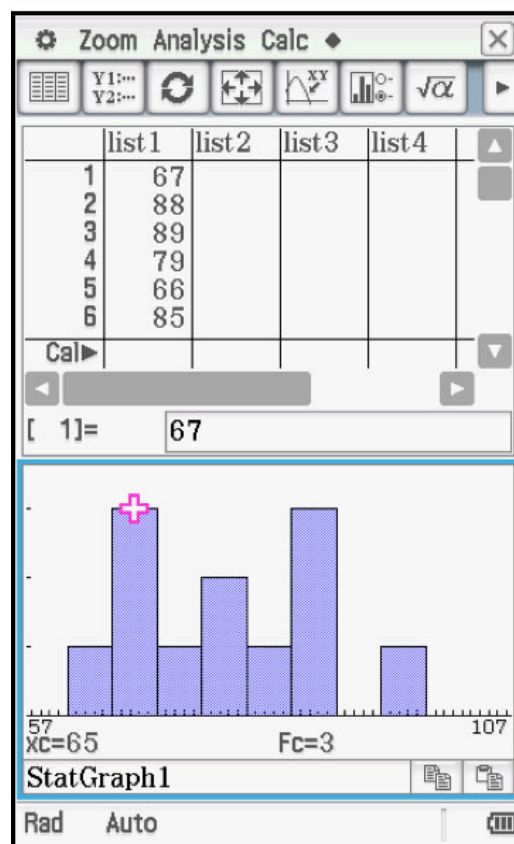
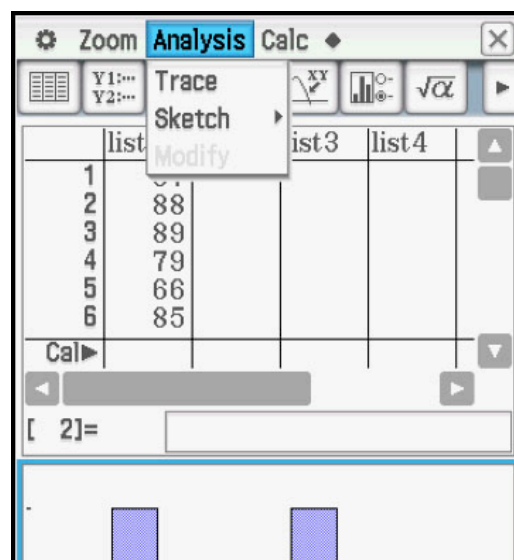
OK Cancel





# Statistics Menu


Tap **Analysis, Trace** to display the frequencies, using the directional pad to move through the data values.



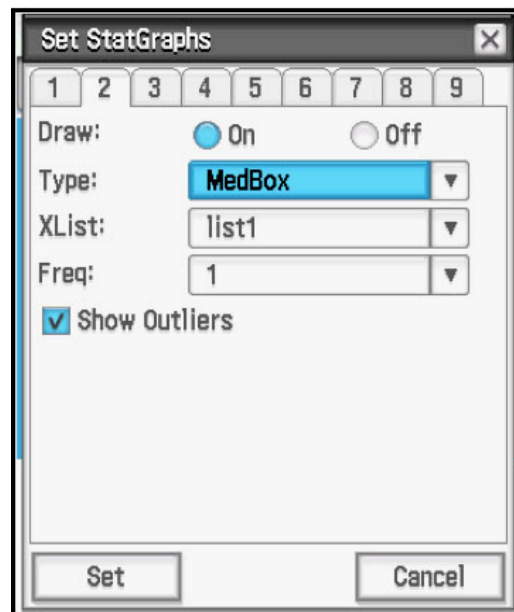
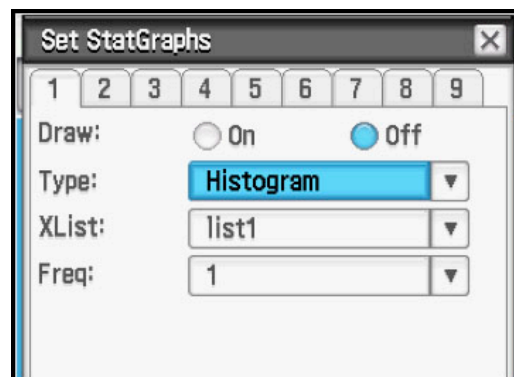
# Statistics Menu

2. Construct a box and whisker plot for these data.

Tap the list editor window.

Tap  to setup the plot. Tap **Off** for **StatGraph1**, then tap the 2 tab to select **StatGraph2**.

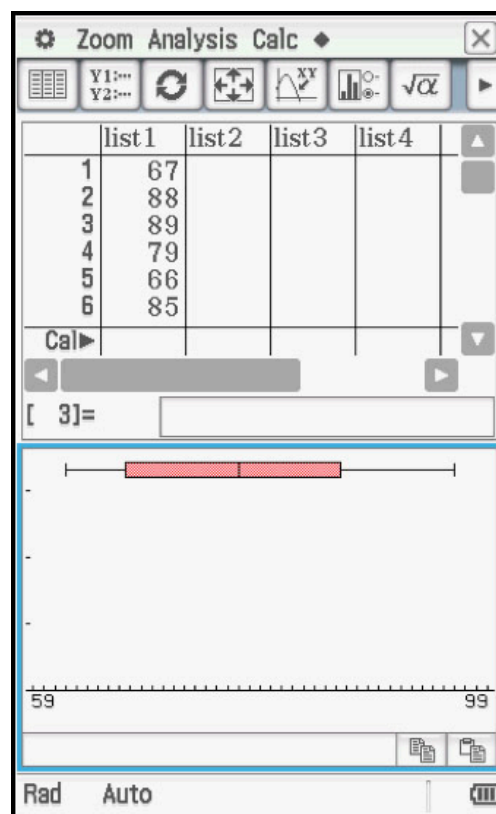
Select **On**, **Medbox**, **list1**, and **1** as shown. Tap the box to **Show Outliers** and tap **Set**.



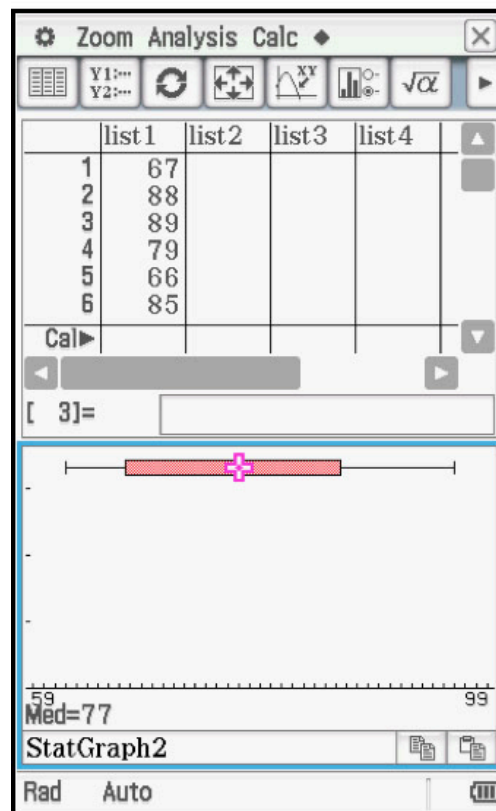


# Statistics Menu

Tap  to view the box and whisker plot.



Tap **Analysis, Trace** and use the directional pad to view the five number summary.



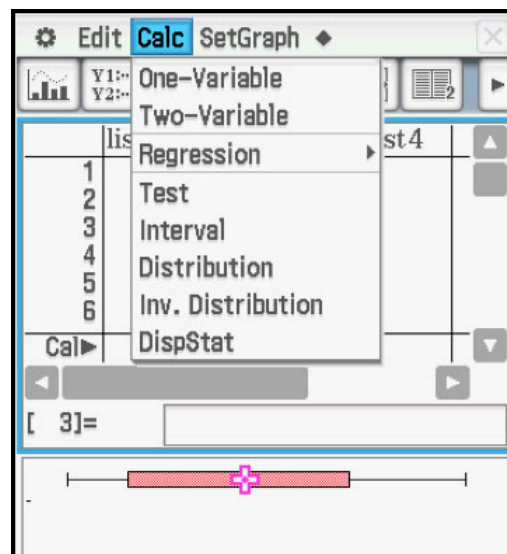
# Statistics Menu

3. Compute summary statistics for these data.

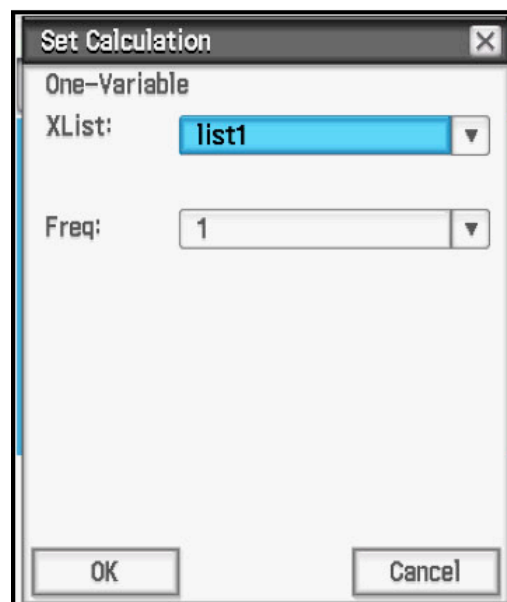
When the list editor window is selected (note the bold border) the **Calc** command is the second command.

When the plot window is selected, the Calc command is the third command.

In either case, tap **Calc, One-Variable**.



Select **list1** and **1**, then tap **OK**.



One variable statistics are displayed; use the scroll bar to see additional information.

