



Box Plots on a Calculator video transcript

<http://topdrawer.aamt.edu.au/Statistics/Good-teaching/Data-reduction/Box-plots/Predicting-AFL-winners>

This is to show you how to draw a side-by-side box plot on the Casio graphic calculator. First, make sure that your calculator is in Stat mode.

(Checking Stat mode in calculator)

I have already entered two sets of data; one in List 1 and one in List 2. I have one more data item to insert in List 1 and I will do that now – 61.

(Inserting data item in List 1)

I am now ready to draw my first graph. I am going to draw a box plot of List 1. That will be graph 1. I need to set the calculator to do so.

(Setting calculator to draw box plot)

It's set to draw StatGraph1, but it's drawing a scatter plot. So I need to change the Graph Type. I want to change it to Box, but I don't have that option. So I select more options and Box can be selected with F2.

(Changing Graph Type to draw StatGraph1)

I check that my information is coming from List 1, which is where I want it to come from, Frequency 1, and the Outliers Off. I am satisfied with that so I press Execute.

(Pressing Execute button)

I now need to select the graph to draw – do that with F4. Currently, StatGraph1 is Off. I wish to have it On so I press F1.

(Pressing F1 to turn StatGraph1 On)

I now draw my graph. This is a boxplot of the data that is in List 1. I can trace this box plot and it will show me the five-number summary: the minimum, first quartile, the median, the third quartile, and the maximum.

(Drawing the graph)

What I am going to do now is do a side-by-side box plot for List 2. I need to first of all set StatGraph2. It's on StatGraph1 so I need to press F2 to select StatGraph2.

(Pressing F2 to select StatGraph2)



The Graph Type once again is Scatter and I need it to be Box so I select More from the menu and change it to Box.

(Graph Type changed from Scatter to Box)

The information is still coming from List 1 so I select XList and I change that list to List 2, Execute, Frequency 1, Outliers Off. Now, I can execute satisfied with that data.

(Executing the final data)

Let's just check what we've got selected. StatGraph1 is set with draw On, but StatGraph2 is Off. I need to select StatGraph2 and I need to make sure that it's on. Now, I have both box plots selected I can draw.

(Box plots selects to draw StatGraph1 and 2)

Now, I have a side-by-side box plot. I can trace. This will trace StatGraph1. We have already done that so I would like to trace StatGraph2: the minimum is 45, Q1, median, Q3, and maximum. I now have a side-by-side boxplot.

(StatGraph2 traced to make side-by-side box plot)