Using the TI-nspire Graphing Calculator to do Statistics

How to create a table of values

Press

1 New Document (Do NOT save document)

4: Add Lists & Spreadsheets

Label your list and input data

How to create One-Variable Statistics

$\bar{x}$ = mean

$\sum x$ = the sum of the data

$\sum x^2$ = the sum of the squares of the data

sx = the sample standard deviation

σx = the population standard deviation

n = the sample size (# of pieces of data)

MinX = the smallest data entry

$Q_1 x$ = data at the first quartile

MedianX = data at the median (second quartile)

$Q_3 x$ = data at the third quartile

MaxX = the largest data entry

SSx = the sum of squared deviations of x from the mean of x.

Make sure you are in the column of your list of data

Press [mcnu] → [4] → [1] → [1]

Press [enter] for 1 list

Press [enter] if everything's ok

How to create a histogram and box plot

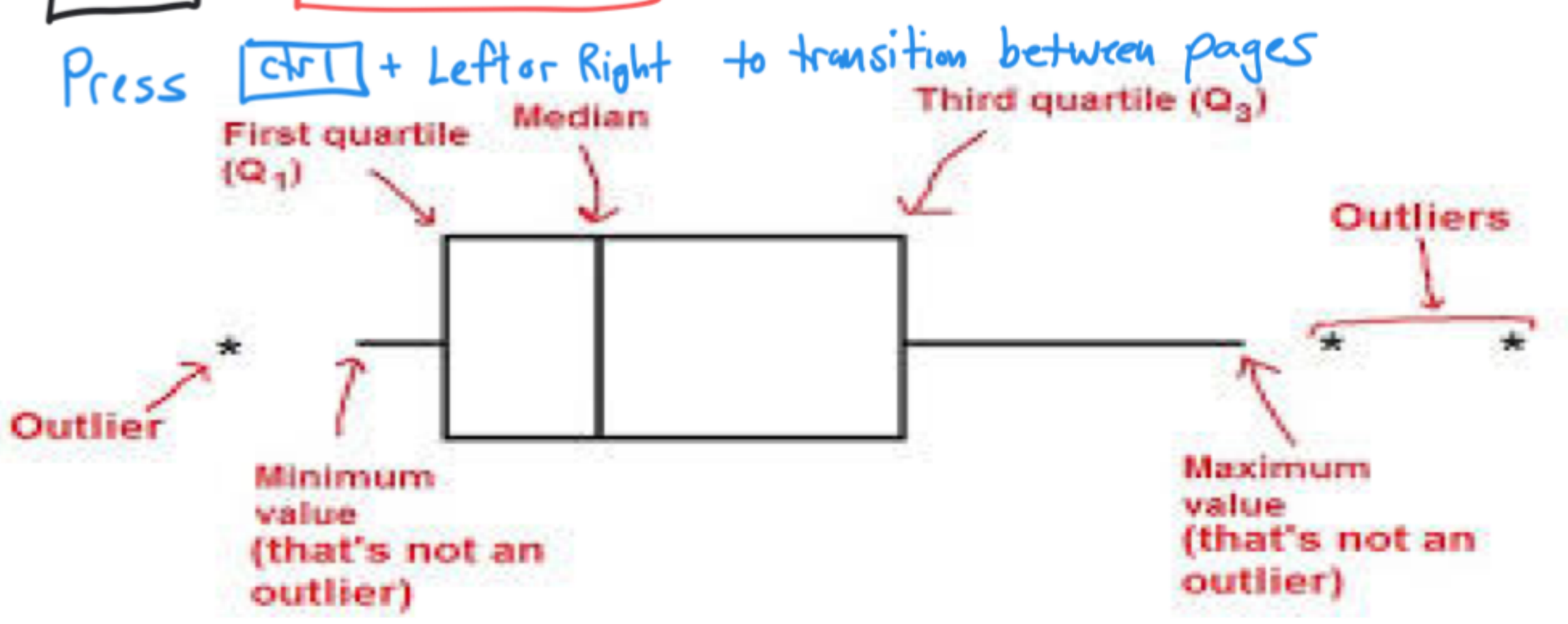
Press ctrl + doc

5 : Add Data & Statistics

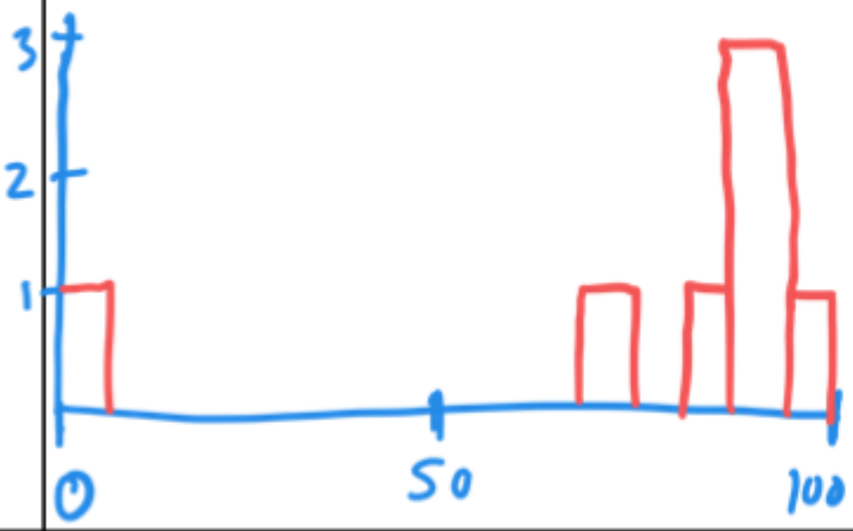
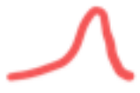
Click on the bottom to choose a list

Menu → 1: Plot Type → Choose the type you need

Press ctrl + Left or Right to transition between pages



Use the following student grades to answer the questions below: 90, 85, 90, 70, 95, 90, 0

Mean: 74.3 Median: 90 Standard Deviation: 31.2 Outlier: 0 Sample Size: 7	Draw a histogram 	Draw a box plot 
What do the mean & median tell you about the data's skew or symmetry? Median is larger than the mean so it is negatively skewed 	What is the best measure of... center: Median spread: Quartiles or 5 number summary Why? Since it is skewed	Is it better to represent the data as a histogram or box plot? Box Plot Why? Since we are looking at the median & quartiles
What changes do you notice in the statistics if you change the 0 to a 50? Mean ↑ 7 Median stayed 90 SD ↓ 16 Outlier is now 50	What changes do you notice in the statistics if drop the 0? Mean ↑ 5 Median is still 90 SD ↓ 8 Outlier is now 70	What changes do you notice in the statistics if you drop the 0 and change the 70 to a 90? Mean = Median SD ↓ 5 No outlier Data is now symmetric