Name _____ Date _____ Period _____

Ch 3 Displaying Quantitative Data: Graphing Calculators

Directions: Complete the following using your graphing calculator. It is time to behold the power of TI!

The following data represents the number of hours spent using the internet in a week by students:

3, 4, 5, 5, 6, 7, 7, 8, 9, 9, 9, 10, 12, 14, 17, 17, 18, 19, 19, 20

Put your answers and sketches on the back.

TI-83 and TI-84

1) Enter your data into L1 [STAT > EDIT> Sort (1)]
2) Identify the following by using STAT > CALC > 1-VAR Stats: mean, standard deviation, 5-number summary, etc.
3) Make a histogram by using <2nd> STAT PLOT. Choose Plot 1: change to ON. Move the cursor to the histogram and press ENTER.
4) Once this is done, press GRAPH.   You may need to make some adjustments before the plot will show up on the screen.   A good way to get a quick viewing window appropriate for the data and for the plot type selected is ZoomStat: PressZOOM, then choose 9:ZoomStat.
   i)   If this does not result in an adequate graph, press WINDOW to see some of the specifications.   For a histogram, Xscl is the width of the intervals.
5) While viewing the histogram, pressing TRACE will allow you to get more information out of the graph.
   i)   Move the cursor left and right to get information on each interval.
6) Turn Plot 1 OFF.
7) Turn Plot 2 ON and make a simple boxplot which is the option on the second row in the middle. Make sure you are using L1 or the list in which your data.
8) Again TRACE and move cursor to get more information.
9) Turn Plot 2 OFF.
10) Turn Plot 3 ON and make a modified boxplot which is the option on the second row on the left. This plot omits the outliers and uses the IQR "fences" to adjust the data.

11) You can clear data list by moving the cursor over the list and hitting ENTER> CLEAR > ENTER

12) To clear all lists: Press <2nd>MEM, ClrAllLists, then ENTER.

13) If your STAT Editor does not show lists L$_1$ - L$_6$, you can reset to the default like so: Press STAT, SetUpEditor, then ENTER.

TI-Nspire

1) On the HOME screen, add a LIST & SPREADSHEET to new document.
2) Enter data into spreadsheet cell.
3) Press [MENU]→Statistics→Stat Calculations→One-Variable Statistics.
4) Press [ENTER] to indicate that you want to analyze one list. Press OK. Then select the cell you want data for and hit OK.
5) Scroll and look at the cells next to the list to see the mean, standard deviation, 5-number summary, etc.
6) Make a histogram: MENU > DATA (3)> QUICK GRAPH (9). May need to hit MENU > Plot Type > Histogram (3)
7) Make a dotplot: MENU > Plot Type > Dot Plot (1)
8) Make a boxplot: MENU > Plot Type > Box Plot (2)

9) To look at properties/setting of these plots, use MENU > Plot Properties and other options under this menu to view, zoom, or adjust the plots.

10) There are some many other options, so just play around!

11) You can name and save the lists, or you can clear the lists.

Place your 1-variables statistics here:

Histogram: Sketch here. Describe the shape, center, and spread.

Boxplot: Sketch here. Describe the shape, center, and spread.

Draw two conclusions about the data. Cite evidence.

Describe how quantitative data & displays (Ch. 3) differ from categorical data & displays (Ch. 2).