Statistics Activity 5:
One-Variable Data with Histogram

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CALCULATORS: Casio: *fx-9750G Plus & CFX-9850G Series*

Keystrokes for the Calculator

From the Main Menu, press **2** for STAT.

If there are data in List 1, follow these directions:

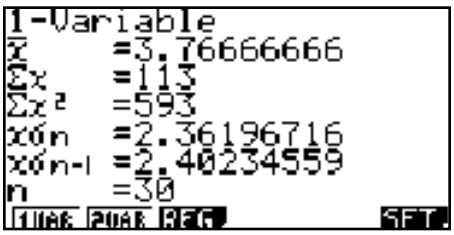
- Press **F6** (make sure that the highlighted cell is List 1 by pressing the right/left arrow).
- Press **F4** (DEL-A) then press **F1** (YES).

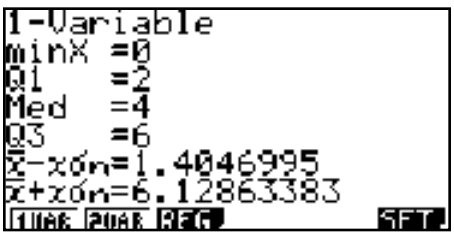
Enter Data:

- Type the accident data in List 1.
- With appropriate cell highlighted, type numerical value then **EXE** to store.

Find One-Variable Statistics:

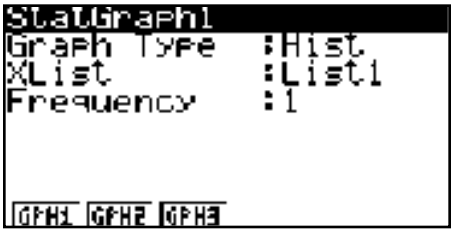
- Press **F2** (CALC) then **F6** (SET).
- With 1-Var Xlist highlighted, press **F1** (List1).
- Press **EXIT**.
- Press **F1** (1-VAR).
- Use the **down arrow key** to scroll for more values.





Create a Histogram:

- Press **EXIT** twice.
- Press **F1** (GRPH) then **F6** (SET).
- Press **down arrow key** to Graph Type, press **F6**, then press **F1** for Histogram.
- Press **down arrow key** to XList then press **F1** (List1).
- Press **EXIT F1** for Graph 1.



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continued

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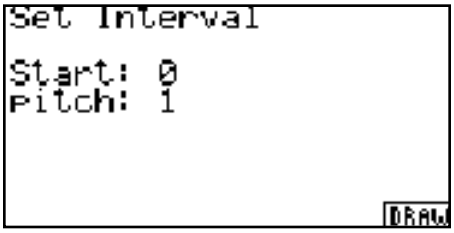
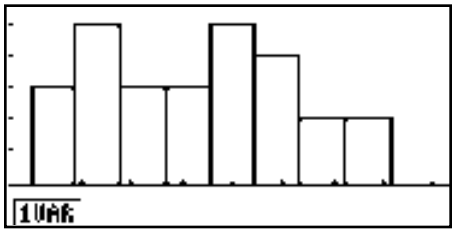
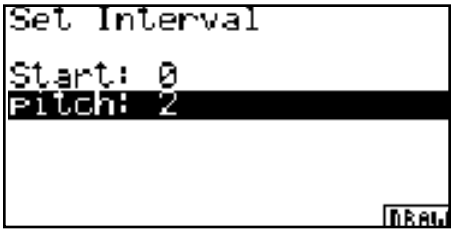
Keystrokes for the Calculator

- You will be shown a Set Interval screen. Start the interval with the minimum numerical value of the data set. Pitch is determined by how wide you want to set each interval. For this data set let pitch be 1 first for 9 intervals then be 2 for 5 intervals.
- To Trace, press **SHIFT F1**.

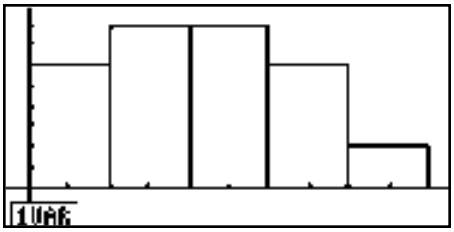






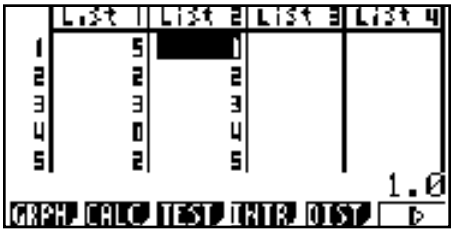
If your graph does not appear, follow these directions:

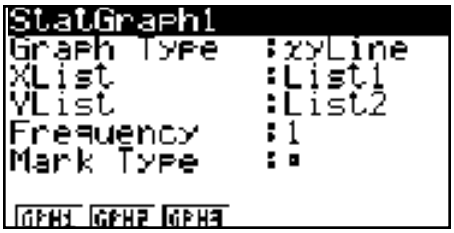
- Press **SHIFT** then **MENU**.
- Press **F1** to change Stat Window to Auto.
- Press **EXIT**.

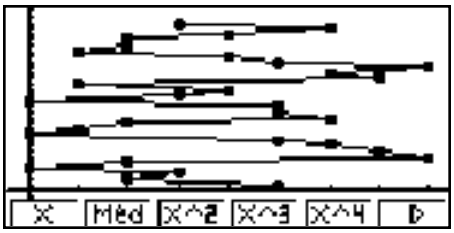


Create a *xy* line (which is also called a connected point line):

- Press **EXIT** twice.
- Enter a new data list into List 2. This data will be the numbers 1-30.
- Press **F1** (graph) then **F6** (set).
- Press **down arrow key** to Graph Type then press **F2** for *xy*.
- Press **down arrow key** to XList then press **F2** (List 2).
- Press **down arrow key** to YList then press **F1** (List 1).
- Press **EXIT F1** for Graph 1.







Name _____ **Date** _____

Statistics Activity 5: One-Variable Data with Histogram

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Student Worksheet Activity 5

The following data set is the number of fender-bender automobile accidents reported per day during a recent month at a local discount store in a large city.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
5	2	3	0	2	8	7
6	5	0	1	2	6	5
5	0	3	4	1	7	6
8	5	4	1	2	2	4
6	3					

a) Calculate and interpret the one-variable statistics for the data.

Mean= _____ Median= _____ Mode: _____

Interpret these measures of central tendency.

_____

_____

Standard deviation for sample = _____

Range = _____

Interpret these measures of dispersion.

_____

_____

Minimum = _____ Q1 = _____ Median = _____

Q3= _____ Maximum = _____

b) Construct a histogram showing 9 intervals and another histogram showing 5 intervals then sketch both histograms below.

Name _____ **Date** _____

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Student Worksheet Activity 5

c) What do the histograms show?

_____

_____

d) How can the histograms be used to interpret the data?

_____

_____

e) Now sketch a connected point line plot by plotting the numbers 1-30 on the x-axis and the data set on the y-axis.

f) What does the line plot reveal about the data set?

_____

_____

_____

_____