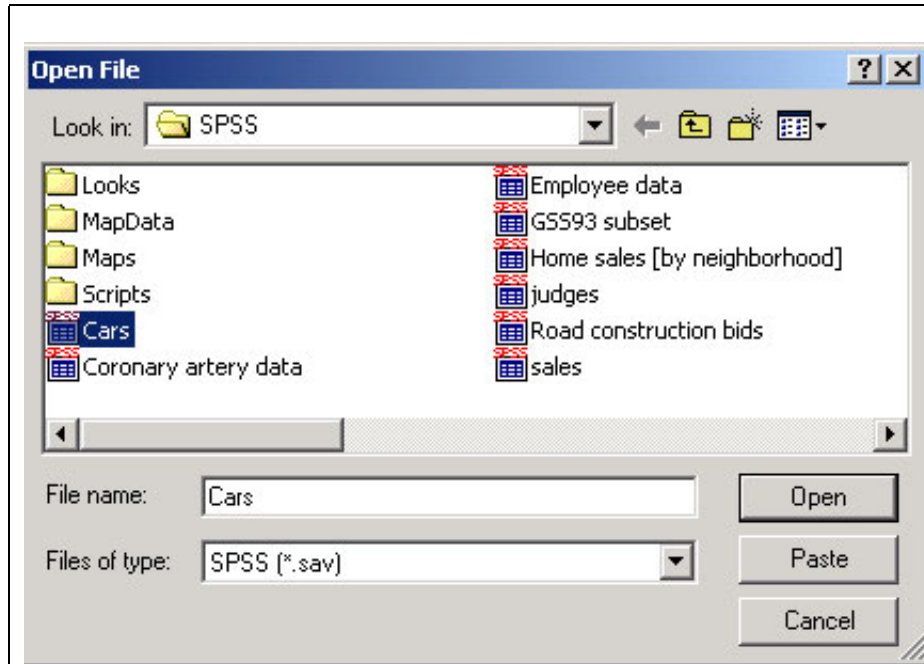
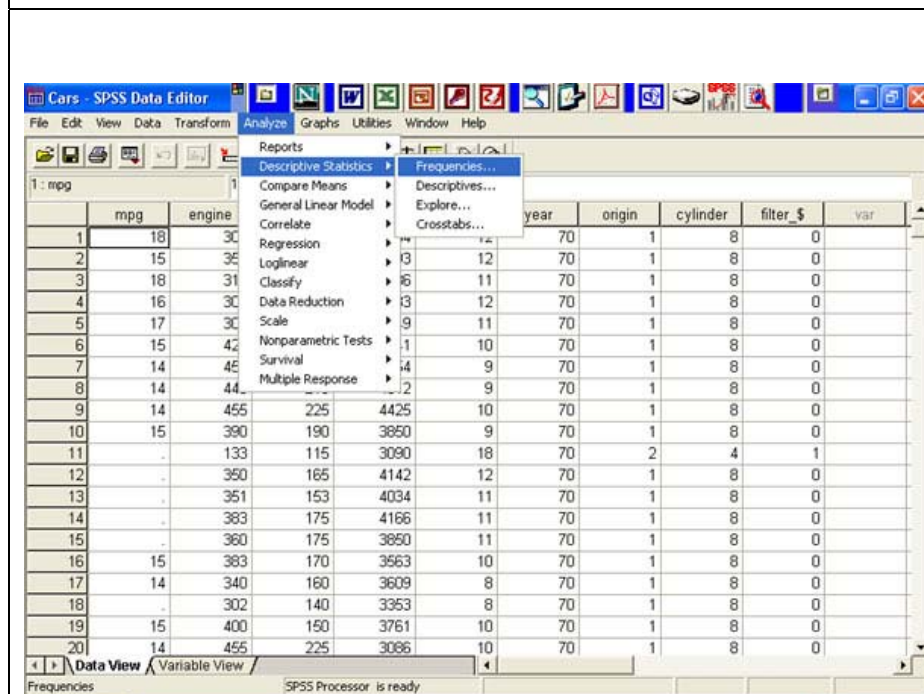


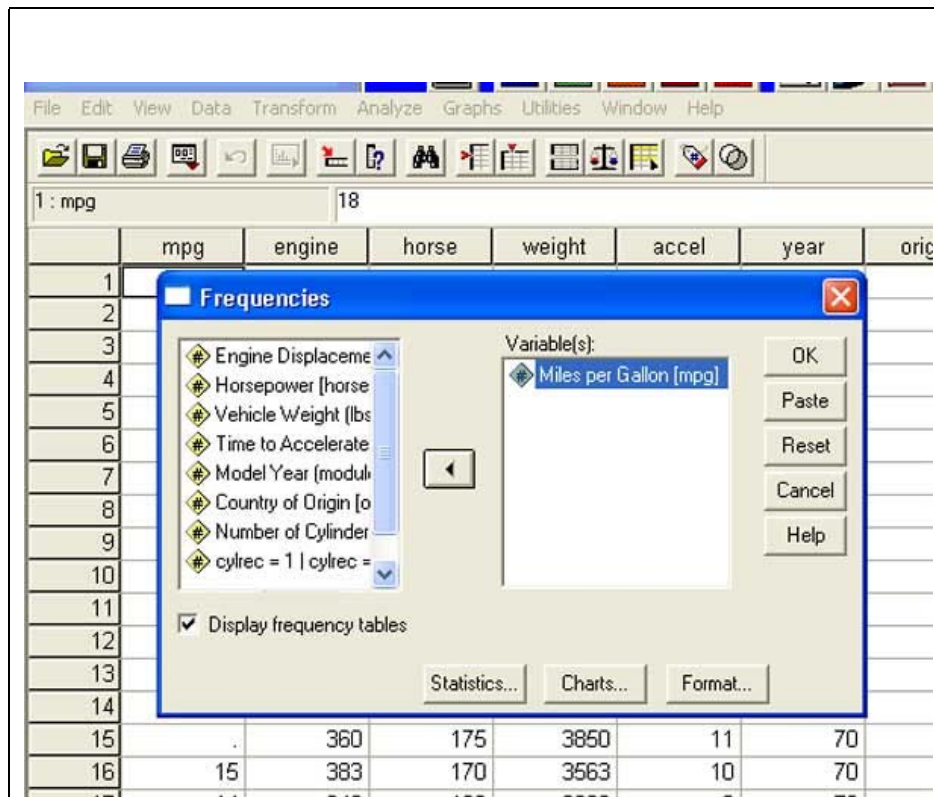
SPSS Tutorial # Three



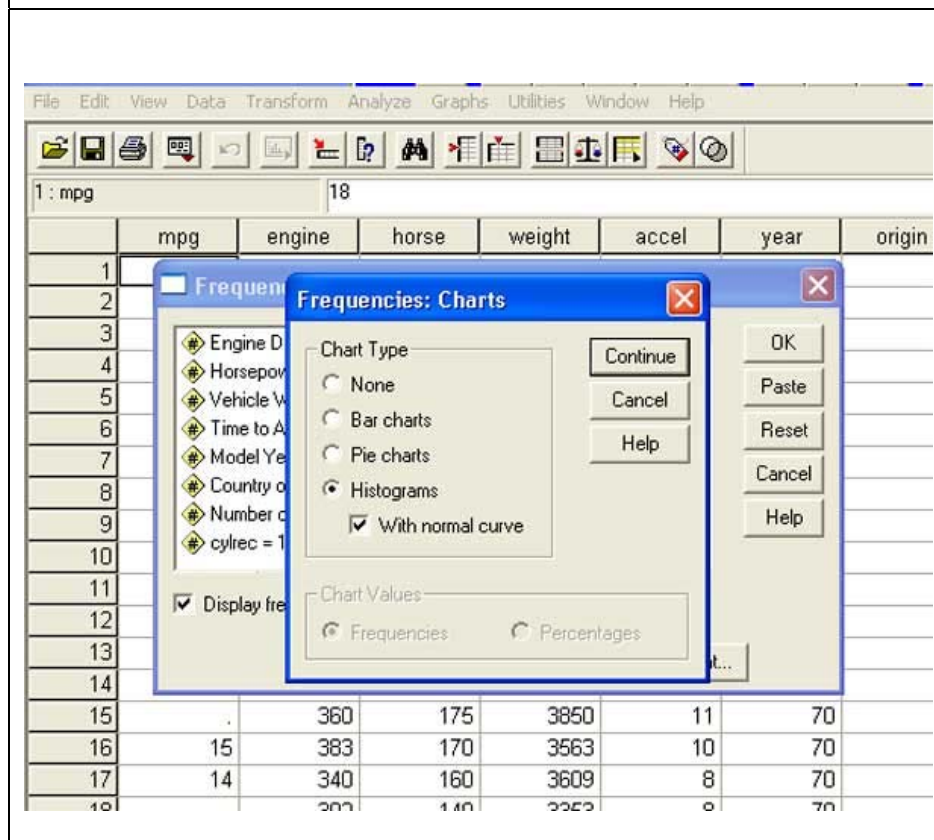
Open the Cars data file as before.



From the SPSS Data Editor window, click on Analyze. Choose Descriptive Statistics. Then choose Frequencies...



Choose the Miles per Gallon [mpg] variable from the list on the left and move it to the list on the right.
 Now click on Charts... from the buttons along the bottom of the Frequencies dialog box.



The Frequencies: Charts dialog box allows you to select several types of chart styles. For the Miles per Gallon (mpg) data, we will use a Histogram.
 Please select Histogram, and make sure the "With normal curve" box is checked. Click on Continue...

1 : mpg 18

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16 15 383 170 3563 10 70

17 14 340 160 3609 8 70

origin

Frequencies: Statistics

Percentile Values

Quartiles

Cut points for 10 equal groups

Percentile(s):

Add

Change

Remove

Central Tendency

Mean

Median

Mode

Sum

Continue

Cancel

Help

Values are group midpoints

Dispersion

Std. deviation

Variance

Range

Minimum

Maximum

S.E. mean

Distribution

Skewness

Kurtosis

Click on the Statistics button and check the Std. deviation, S.E. mean, Mean, Median, and Mode boxes. Click on Continue...

1 : mpg 18

mpg engine horse weight accel year origin

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15 . 360 175 3850 11 70

16 15 383 170 3563 10 70

Frequencies: Format

Order by

Ascending values

Descending values

Ascending counts

Descending counts

Multiple Variables

Compare variables

Organize output by variables

Suppress tables with more than 10 categories

Continue

Cancel

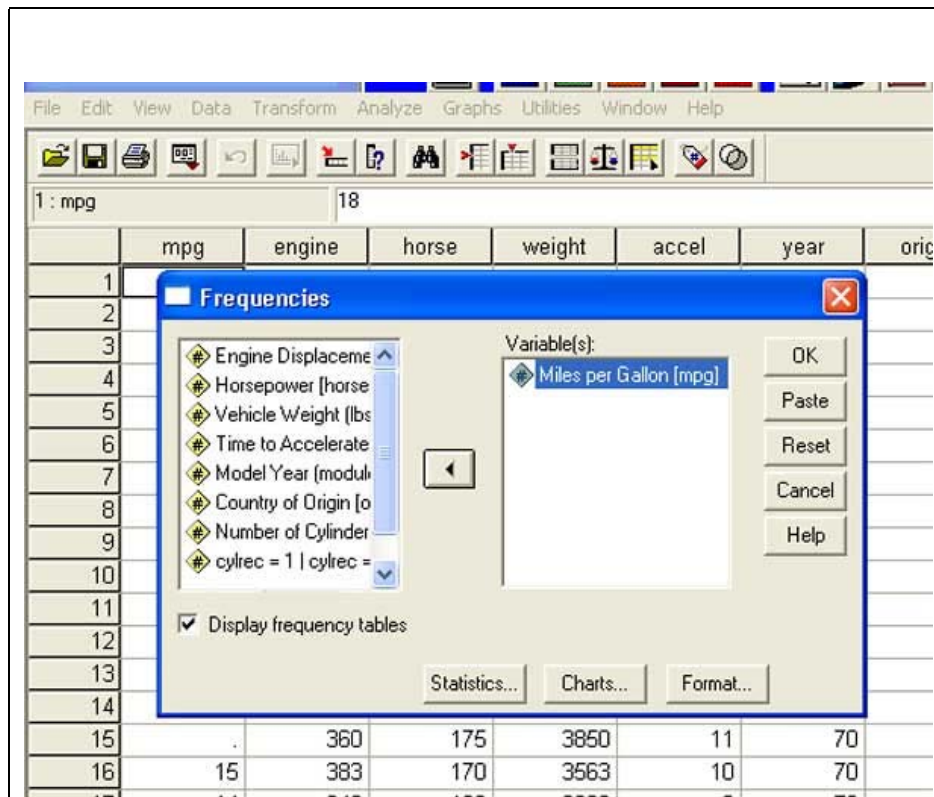
Help

Statistics...

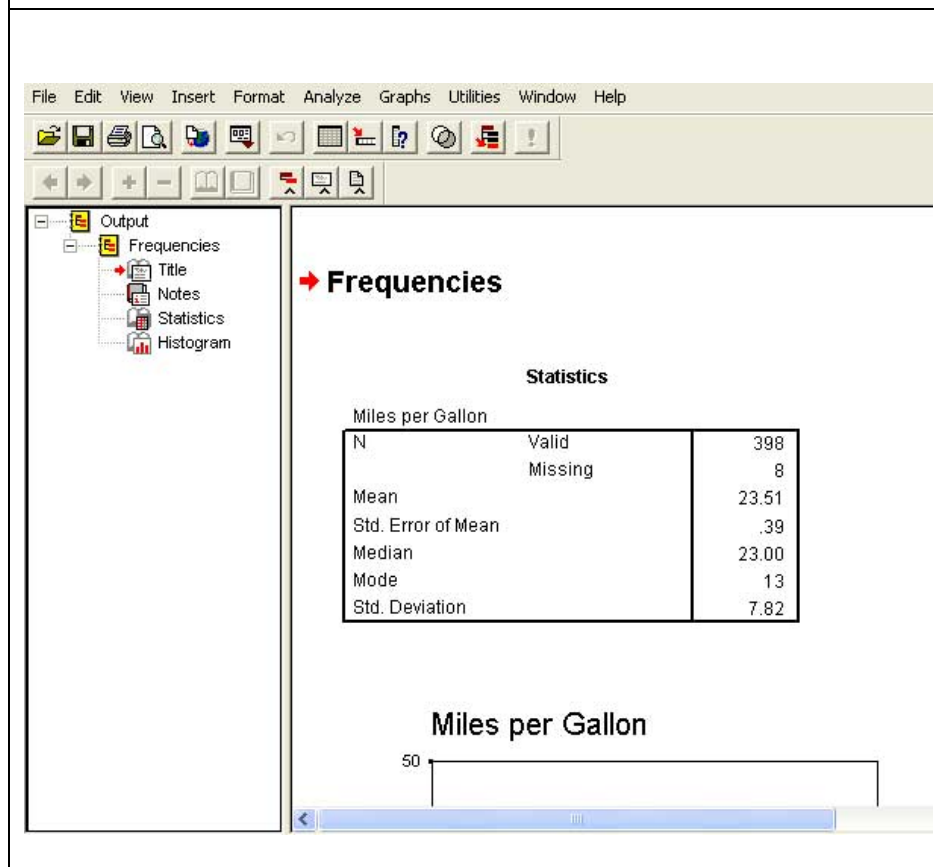
Charts...

Format...

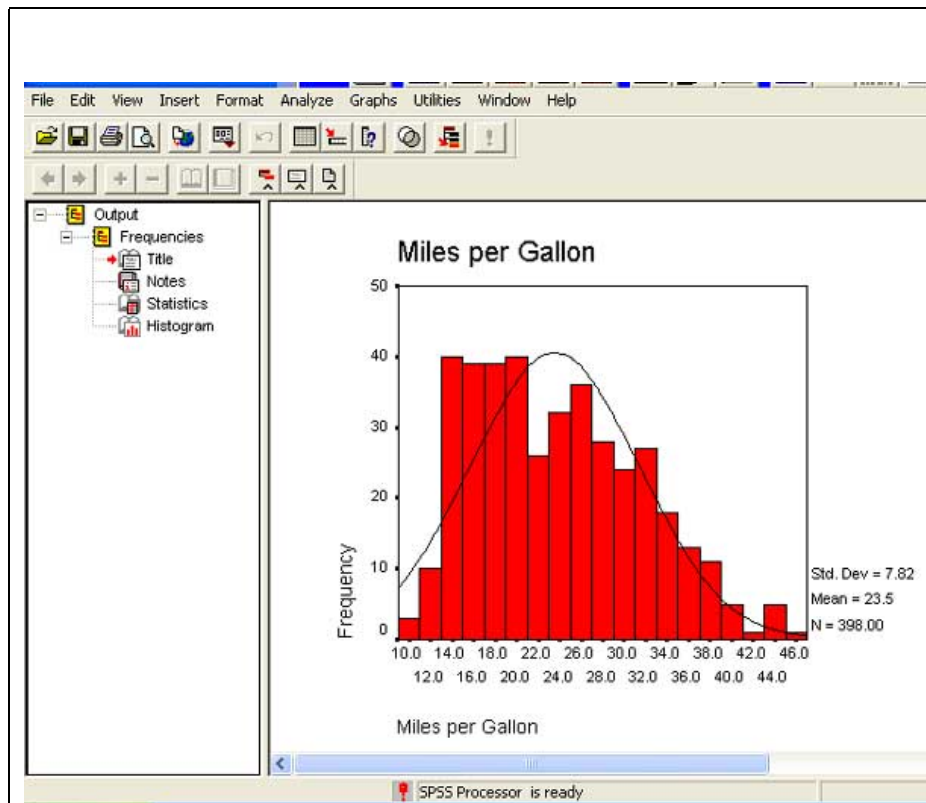
Click on the Format button and this time choose Ascending values, Compare variables, and check the Suppress tables with more than 10 categories. Click on Continue...



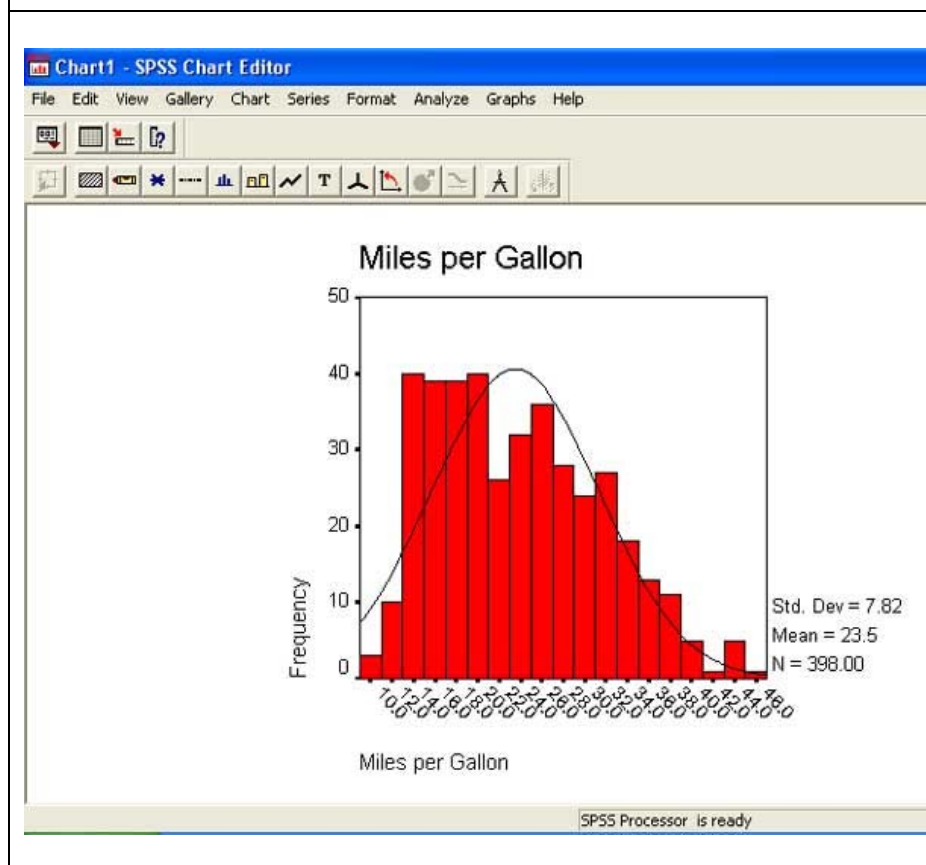
Click on OK...



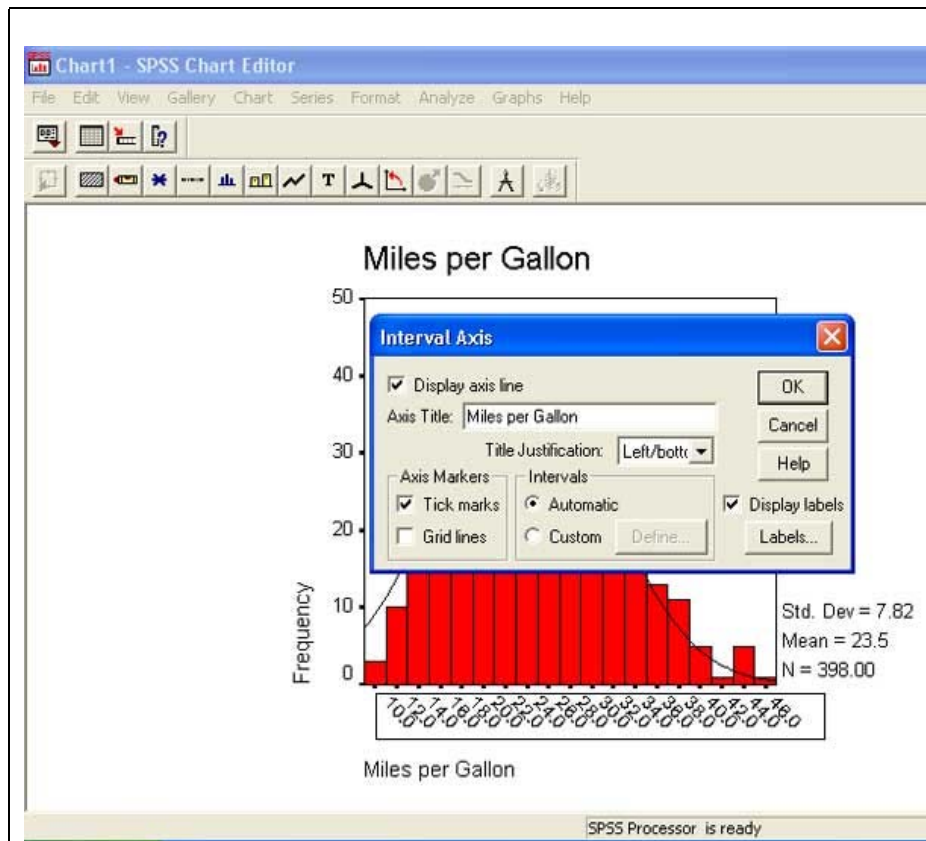
This is what the Output window should look like...
Now, scroll down to view the chart under Miles per Gallon...



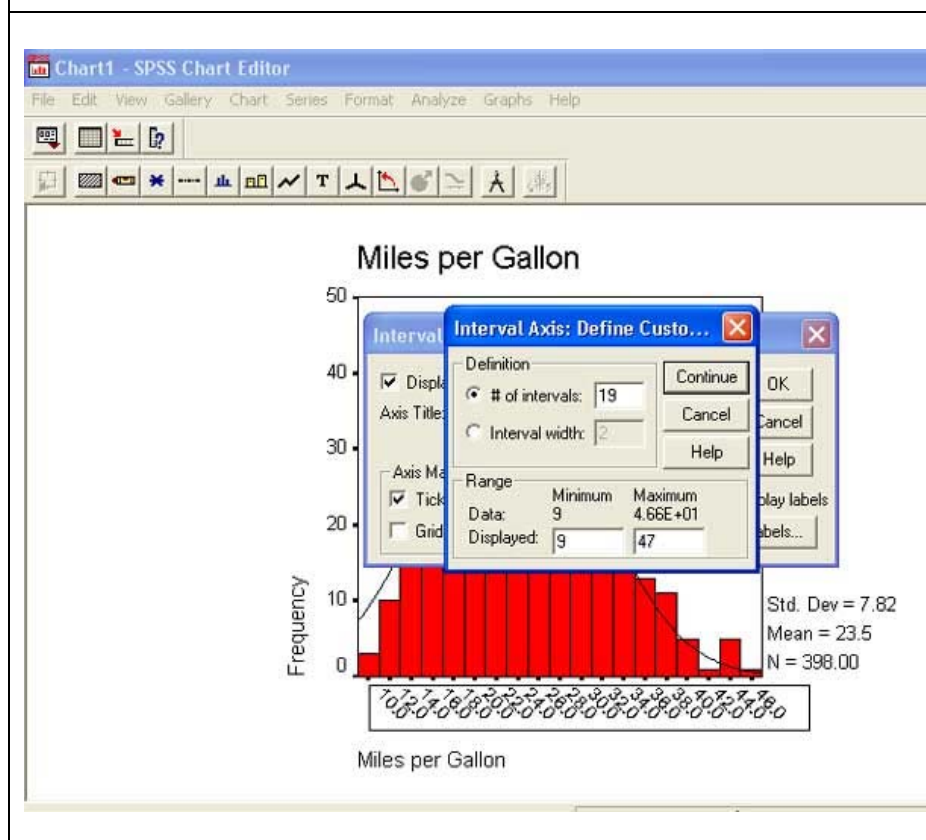
This is what your chart should look like. We are going to play around with the number of bars in this graph. One way to do this is to click on the values listed at the bottom of the graph (the values listed along the X axis). Click somewhere among these values and bring up the Chart Editor window...



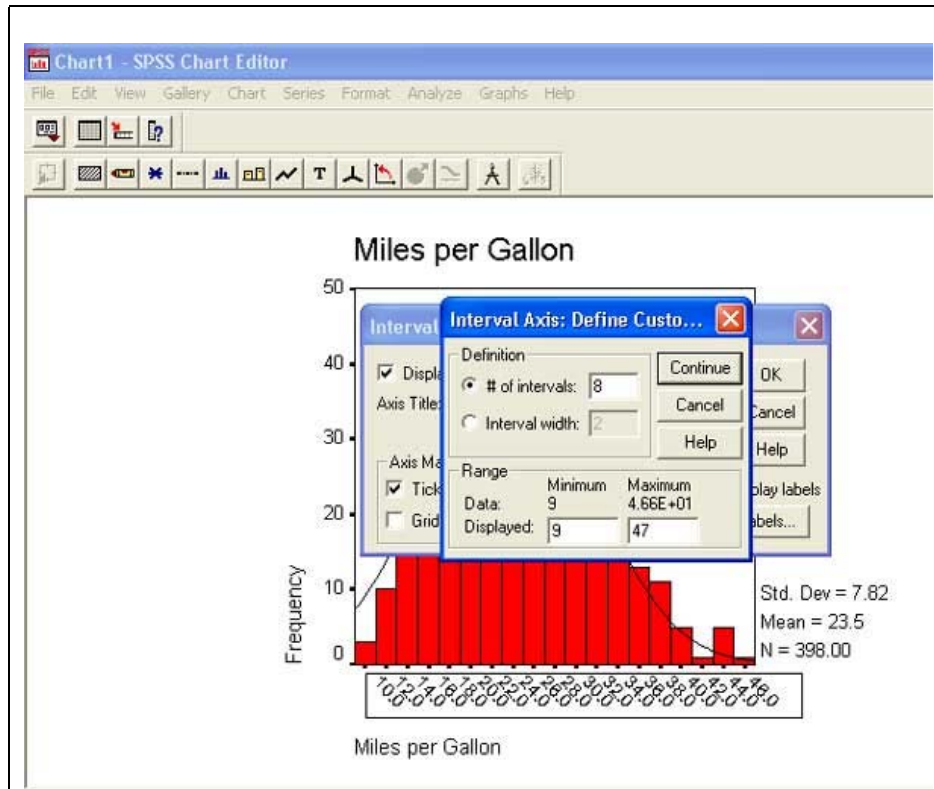
A new window appears. The name of this window is Chart1 - SPSS Chart Editor. Notice how the values along the X axis change.



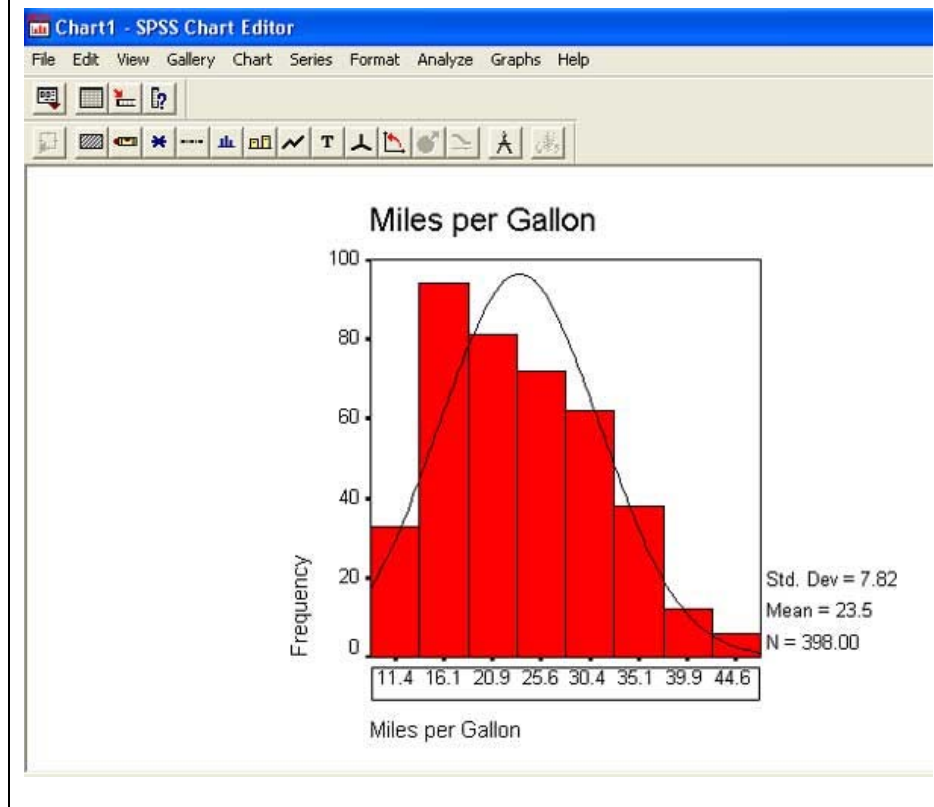
The look of our chart can be easily modified by clicking on values within the chart. Here we will first change the number of values along the X axis. To do this, click on Custom, then Define...



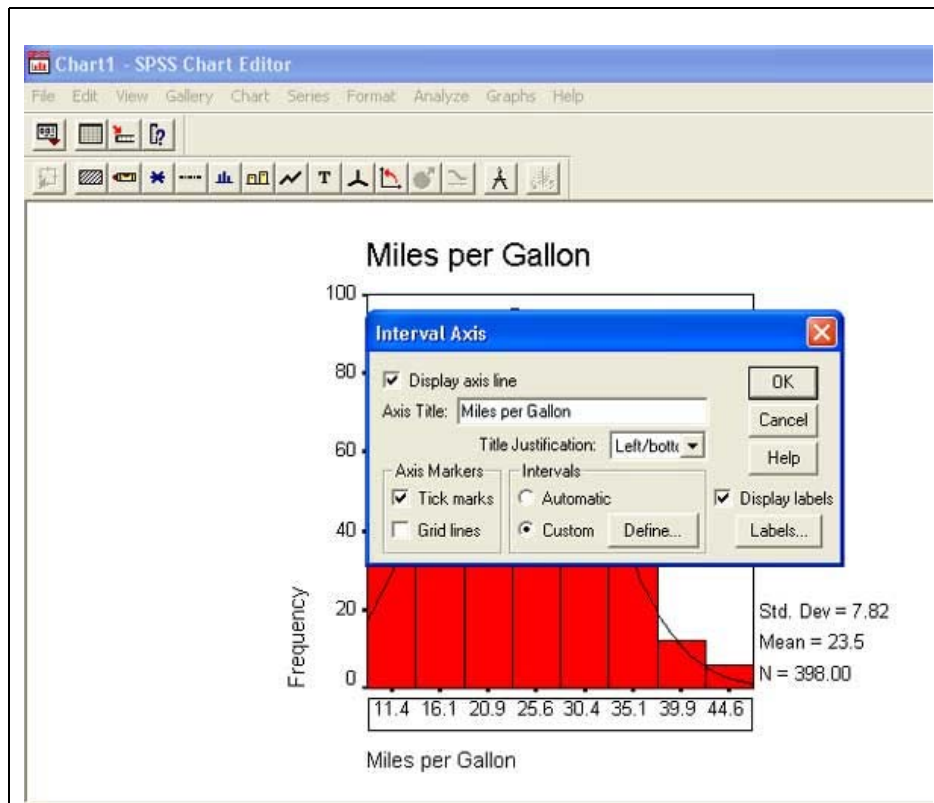
This will bring up the Interval Axis: Define Custom... dialog box. This box is telling us that the chart has 19 intervals (# of intervals: 19) and the range of values goes from a Minimum of 9 to a Maximum of 47 (4.66E+01 is scientific notation telling us that 4.66 is multiplied by 10 to make 46.6 which SPSS rounds to 47 for this chart).



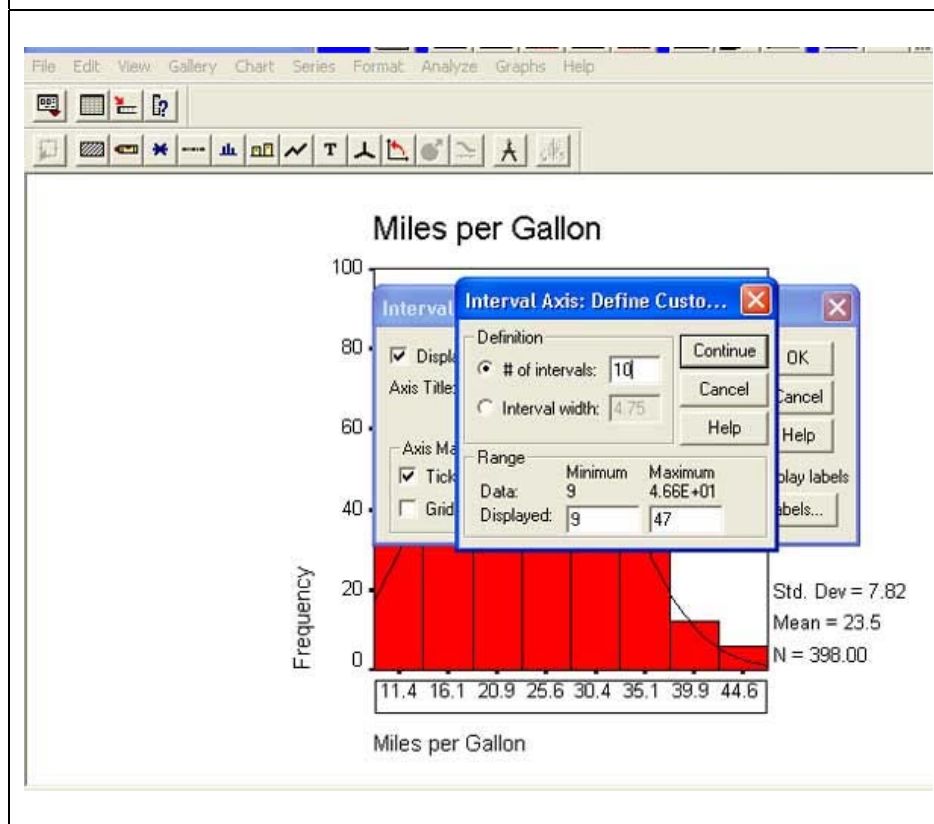
Change the number of intervals from 19 to 8 and click on Continue... Then click on OK...



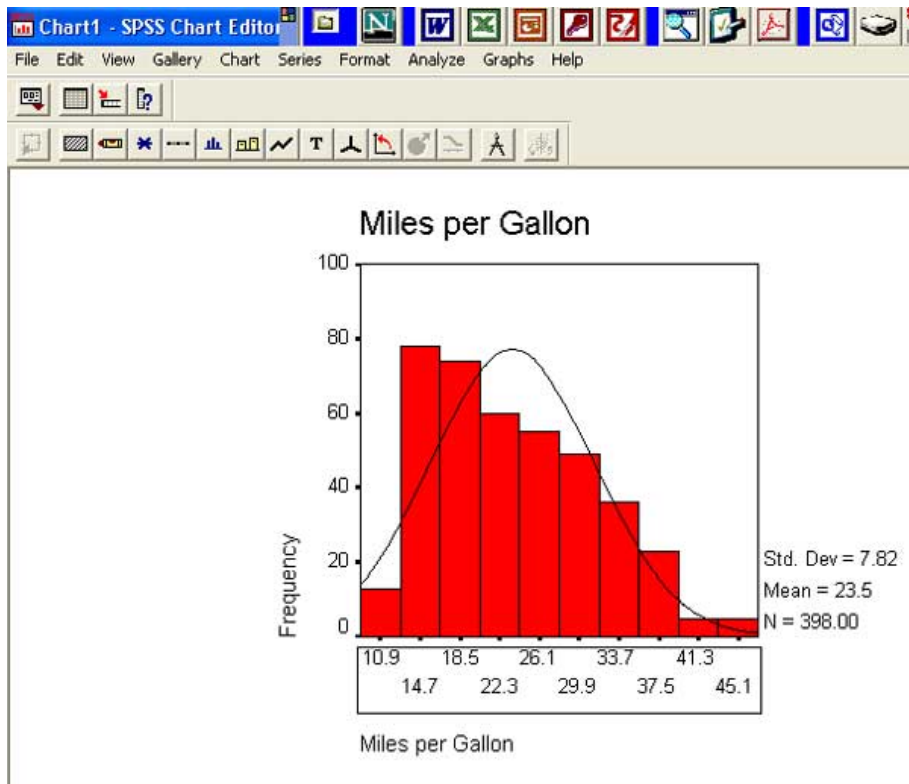
Notice how the chart changes. There are now fewer values along the X axis, and there are fewer bars in the chart. We will now change the number of bars (intervals) again by clicking on the values along the X axis.



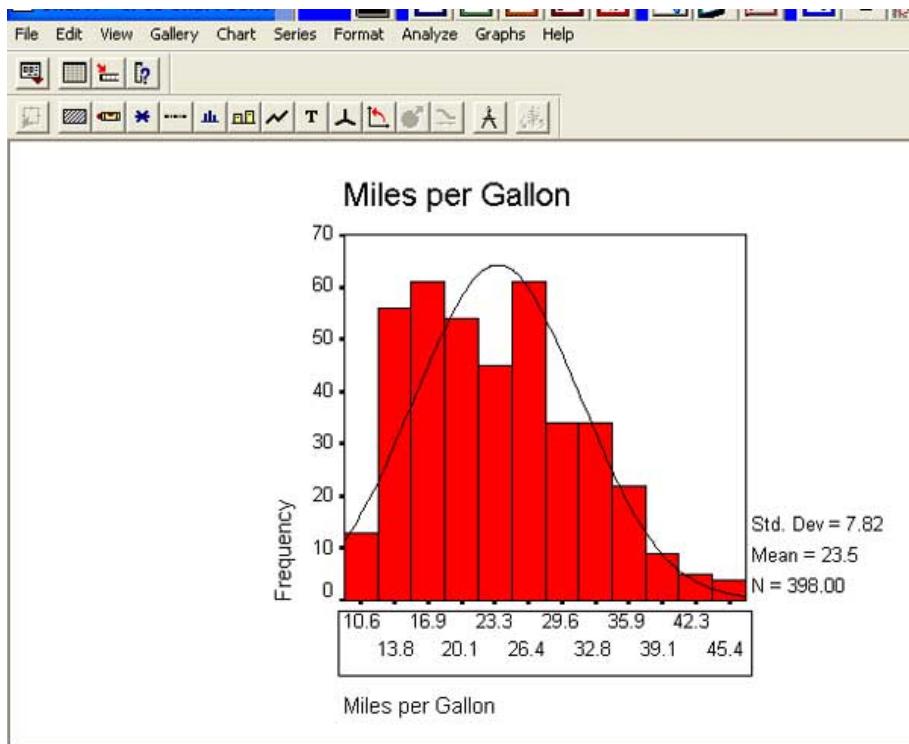
This will again bring up the Interval Axis dialog box. Click on Define next to the Custom button...



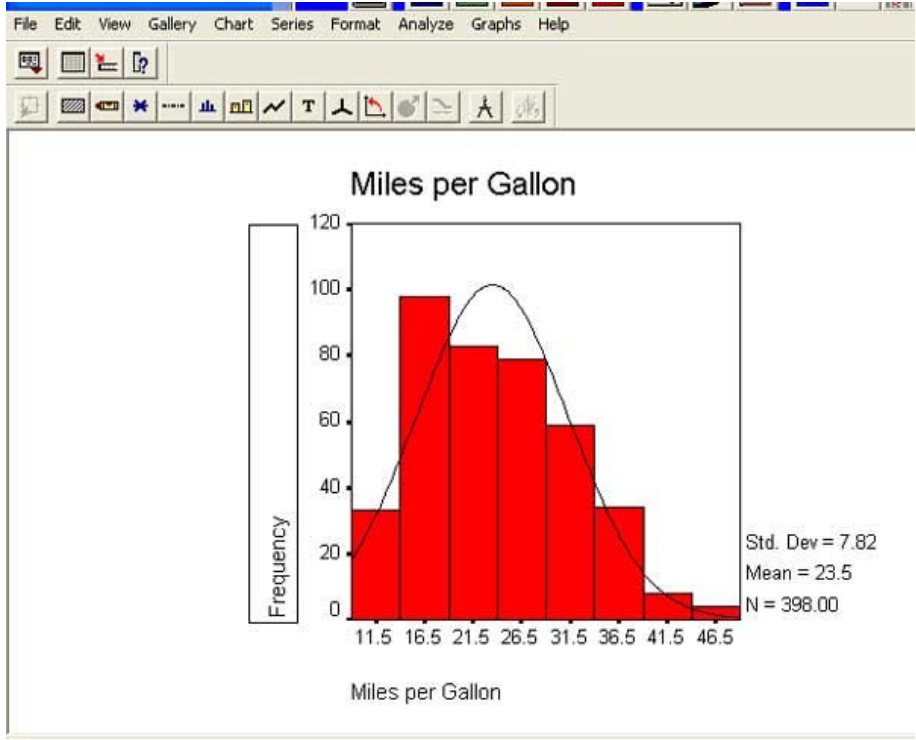
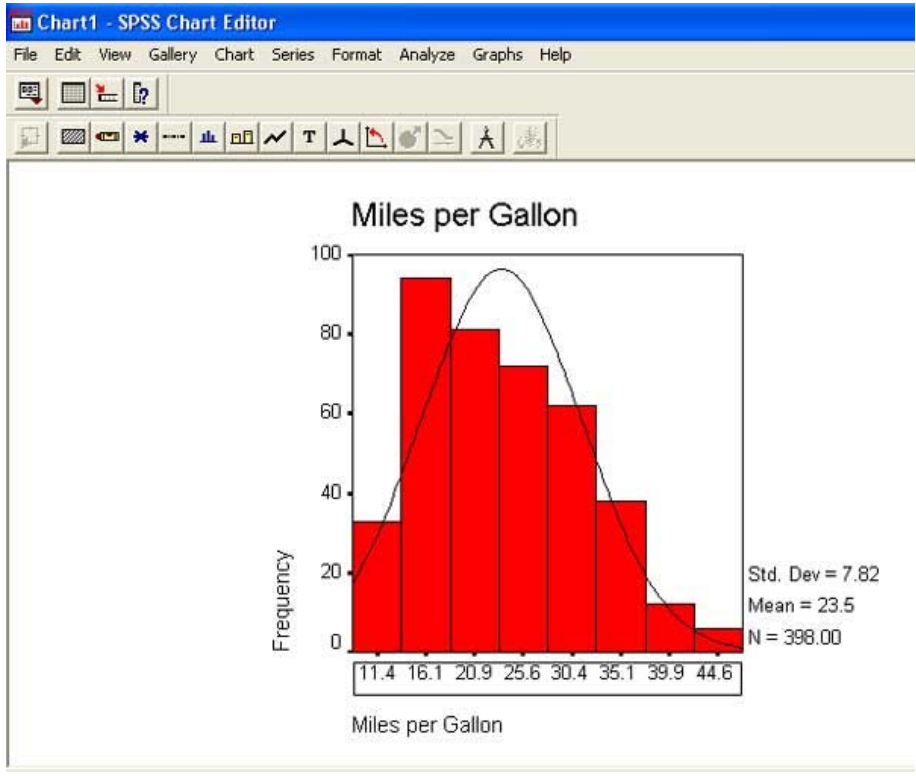
Change the number of intervals (# of intervals:) from 8 to 10. Click on continue... Then click on OK...



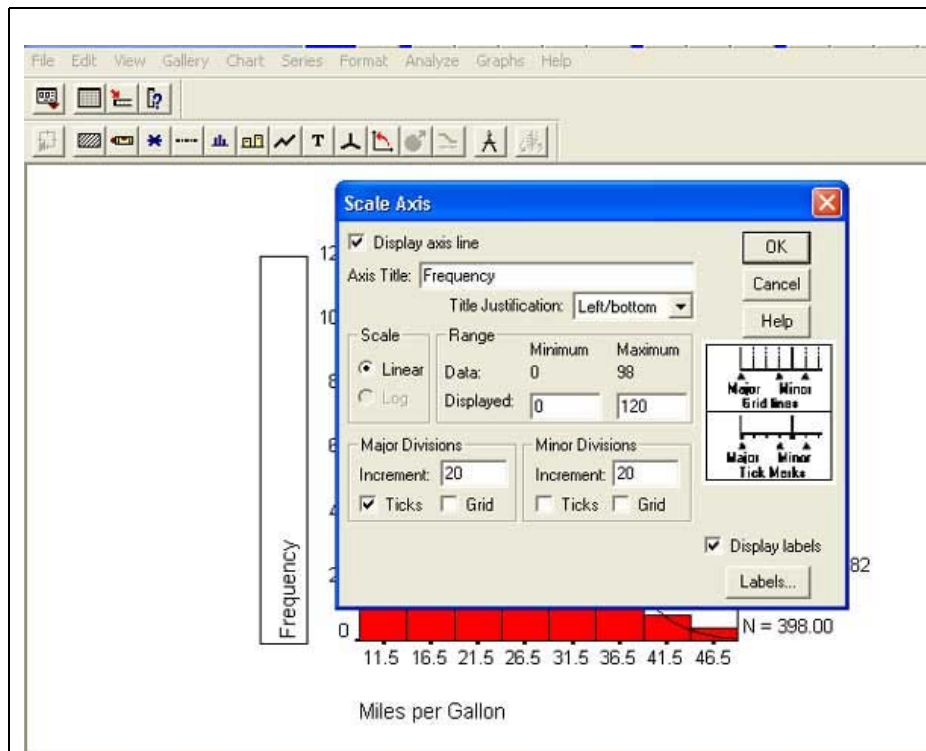
Notice that the labels for the X axis change and the number of bars changes from 8 to 10. Go through this sequence once more to make a graph with 12 bars, as shown in the next picture...



For the remainder of this Tutorial we will use the graph with 8 bars so please go through the sequence one more time and make a graph with 8 bars. It should look like the one in the next panel...



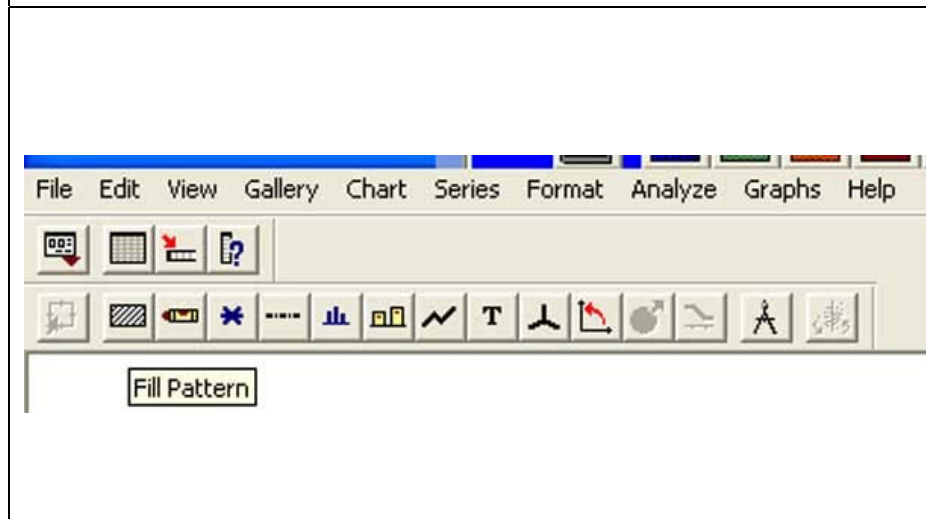
Now double click on the label for the Y axis, that is, click on Frequency...



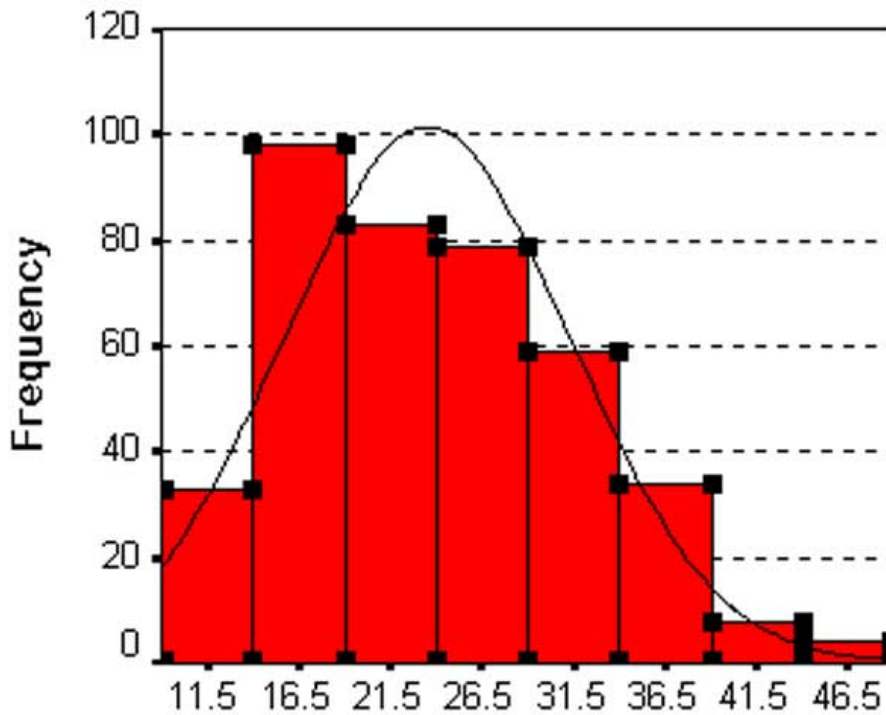
In the Title Justification: box, change Left/bottom to Center...
 Now try playing around with all of the available tools to edit your chart. These tools can be found along the top of your window as shown next...



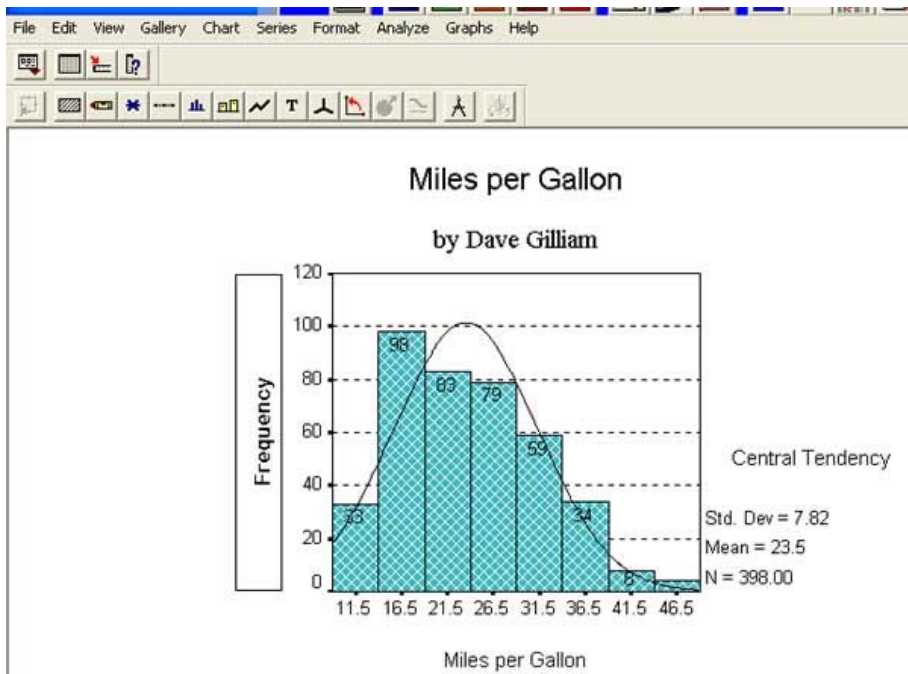
Click on each icon and view the resulting dialog box. For some chart editing tools to be active, you must first click on the part of your graph you wish to edit...



For example, to change the “fill pattern” for your bars, you must first tell SPSS you want to edit the bars in your graph. To do this, just click once on the bars in the graph.



When selected for editing, you bars should look like this... Now select the "fill pattern" icon, and change you fill pattern. Try clicking on each of the icons and changing your graph. Be sure to add your name like I did. Print your graph and hand it in. You can see my graph below.



My graph.