Making a Single Boxplot Using Minitab

1. Put your data values in one of the columns of the Minitab worksheet.

2. Add a variable name in the gray box just above the data values.

3. Click on "Graph" and then click on "Boxplot".

4. Under "One Y", make sure "Simple" is highlighted and then click on "OK".

5. Choose the variable you want to graph and click on "Select".

6. Click on the "Scale" box and check the box next to "Transpose value and category scales". This step will make the boxplot horizontal.

7. Next, click on the "Gridlines" tab, click on the box next to "Y major ticks", and click on "OK". This step adds vertical gridlines to the final graph.

8. Click on the "Labels" box.

9. Type in a description of your data under "Title".

10. Next to "Subtitle 1:", state that you created the boxplot.

11. Click on "OK" in that window and click on "OK" in the next window.

12. Right click on the box and choose "Edit interquartile range box …". Below "Fill Pattern" click on the circle next to "Custom". Then click on the triangle next to "Background color:" and choose a light color. If the background color is too dark, you may not be able to see the median line in the box. This is especially true if you are printing in black and white.

13. If you have a Microsoft Word document open, you can right click on the graph and choose "Send Graph to Microsoft Word" and the boxplot will appear in your Word document. Otherwise, click in the gray area outside the graph. Choose the "Edit" tab at the very top of the window and then choose "Copy Graph". You now will be able to copy your boxplot into a text document.

Example (Navidi & Monk, *Elementary Statistics*, 2nd edition, #31 p. 143, 1st 4 columns): The table below shows the number of tribal casinos in a sample of 16 states.

3	7	14	114	2	3	7	8
26	4	3	14	70	3	21	1

Open Minitab and enter the data under C1. The table at left shows a portion of the entered data.

↓	C1	C2
	Casinos	
1	3	
2	7	
3	14	
4	114	
5	2	
6	3	
7	7	
8	8	
9	26	
10	4	

Now click on "Graph" and "Boxplot". Make sure "Simple" under "One Y" is selected and click on "OK".

Click in the box under "Graph variables:", choose C1 from the box on the left and click on the "Select" button.

Next, click on the "Scale" button and click in the box next to "Transpose value and category scales".

Now click on the "Gridlines" tab. Click in the box next to "Y major ticks" and then click on "OK" in that window.

Click on the "Labels" button. Put a description of the data such as "Number of Casinos in a Sample of 16 States" under "Title". Next to "Subtitle 1:", write

"created by *your name*". Click on "OK" in that window and on "OK" in the window below it.

Right click on the box and choose "Edit interquartile range box …". Below "Fill Pattern" click on the circle next to "Custom". Then click on the triangle next to "Background color:" I chose light cyan. Then click on "OK".

Click on the axis title, and a window will appear with the title below the word "Text" near the bottom. I changed the title from just "Casinos" to "Number of Casinos". Clicking on the "OK" button will change the axis title in the graph.

If you are working in Word, you can right click on the time series and choose "Send Graph to Microsoft Word", and the time series will appear in your Word document. If you are working in another program, you can right click on gray area, choose "Copy Graph" and then paste the boxplot into your document.

Number of Casinos in a Sample of 16 States
by David Gurney

Number of Casinos