Sorting Data, Random Samples, and Side-by-side Box Plots

I. Sorting Data

Last time we worked on a data set where the number of auto thefts was reported state by state. Many of you wanted to sort the data in alphabetical order. This is option is found under “Tables” in the main menu.

Click on “Tables” and choose “Sort”. This opens up a window where you tell JMP how you want the data sorted. Say we want the states to be presented in alphabetical order. Highlight “State” and click on “by”.

Before you click on “sort”, give the new data table a name so you know where you can find the sorted data. When that is done, click “sort” and the new data table pops up.

II. Random Samples

On some occasions, we might want to take a random sample from the data we have in our JMP data table. Click on “Tables” in the main menu, and choose “subset”. In the new window there is a choice between “Selected Rows” and “Random Sample”.

“Selected Rows” creates a subset of rows that you chose yourself (by highlighting them in the data table), while “Random Sample” creates – a random sample. Choose the sample size and click OK. A new data table with randomly chosen data pops up.

III. Side-by-Side Box Plots

We did this last time; so let me give you the directions in written form.

To create side-by-side box plots, have two columns ready in your data table. Be sure that your grouping variable is recorded as an ordinal variable. Click “Analyze”, then “Fit X by Y”. The next window should look familiar. Choose column one and click “Y, Columns”, then choose column two and click “X, Factor”. Click OK. What you will see in the resulting window is two or more vertical lines of dots, not box plots. To get the box plots, click the red triangle at the top of the window and choose “Quantiles”. Now you should see the familiar box plots.