TI-Nspire™ Software Script

Analyzing categorical data using a bar or pie chart (Tutorial D4)

http://www.atomiclearning.com/k12/en/movie/86418/play_window?type=Tutorial&sid=2421

[00:00:00.00]
You can view your data using a bar chart. This can be especially
helpful when you want to compare data results. In this

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case, I have some data that relates to the number of votes
different people received in class. The first thing I want

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to do is enter this data into the Lists and Spreadsheet
application. I'll click Insert, and then select Lists and

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Spreadsheet. The TI-Nspire bar chart can analyze raw categorical
data, so I'll place all of my votes in column A in order

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to analyze them. To do this, I'll type an open quote, and
then the letter A, and notice an end quote is added automatically

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in cell A1. This will represent person A. It is important
to note that all categorical data must be entered within

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quotes. In this case, person A received seven votes. So
I'll click Data in the Document Tools, and then select

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Fill. Now, I'll use the arrow keys to highlight the cells
through A7, and then I'll press Enter. This will enter

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A seven times. Next, I'll press the down arrow key until
I've highlighted cell A8, and then I'll type an open quote,

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then the letter B, and then press the right arrow key to
move beyond the end quote. This will represent person B,

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who received a total of six votes. So, again, I'll click
Data, and then choose Fill. I'll use the down arrow key

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to highlight the cells through cell A13, and then I'll
press Enter. I'll use that down arrow key again to move

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to cell A14, and then I'll type an open quote, then the
letter C, and then an end quote is added automatically.

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Person C received eleven votes. So I'll click Data, and
then Fill. I'll move down to cell A24, and then press the

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Enter key. Now, I'll name the column by clicking in the
title cell, which is the cell at the top of column A. I'll

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call this column Votes by typing V-O-T-E-S, and then pressing
Enter. I'll insert the Data and Statistics application

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by clicking Insert, and then choosing Data and Statistics.
The screen that you see here is called a Case Plot. It

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allows for exploration of the data by clicking on a point
to see the full description of the data, or changing the

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caption to look at the grouping by variable. I can click
on the axes to assign a variable, or I can click and drag

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a point to allow the software to begin grouping the data
based on the caption. As I drag the point, the dots rearrange

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themselves into a dot chart. To view this data as a bar
graph, I'll click Plot Type in the Document Tools, and
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then Bar Chart. Now, I can more easily graphically compare
A, B, and C. You'll notice a highlight appears on the bar

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chart from the point that I had selected. To remove this selection,
I can just click anywhere in the plot area that is not

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covered by the data. If I wanted to compare A, B, or C
as a percentage of the whole instead, I could view this

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data as a pie chart by clicking Plot Type, and then selecting
Pie Chart.

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