

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

http://www.atomiclearning.com/k12/en/movie/85861/play_window?type=Tutorial&sid=2410

[00:00:00.00]

You can view your data using a bar chart. This can be especially helpful if you want to compare data results. In this

[00:00:09.00]

case, I've got some data that relays to the number of votes different people received in class. The first thing I want

[00:00:16.00]

to do is enter this data into the Lists and Spreadsheet application. I'll press the Home key, and then select Lists

[00:00:25.00]

and Spreadsheet. The bar chart in TI-Nspire analyzes only raw data, so I'll need to place all of my votes in Column A

[00:00:35.00]

in order to analyze them. To do this, I'll press the Symbols key, and using the arrows on the Touchpad, I'll

[00:00:46.00]

select open quote, and then press Enter. Next I'll type the letter A, and notice an end quote is added automatically

[00:00:56.00]

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

[00:01:06.00]

quotes. In this case, person A received seven votes. So I'll press the Menu key. Then choose Data, and then select

[00:01:18.00]

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

[00:01:30.00]

enter A seven times. Next, I'll use the down arrow key until I've highlighted cell A8, and then I'll press the

[00:01:40.00]

Symbols key to choose open quote. I'll type the letter B, and then press the right arrow key to move beyond the

[00:01:51.00]

end quote. This will represent person B, who received a total of six votes. So again, I'll press the Menu key, and

[00:02:03.00]

then select Data, and then choose Fill Down. I'll use the down arrow key to highlight the cells through cell A13,

[00:02:15.00]

and then I'll press Enter. I'll use that down arrow key again to move to cell A14, and then I'll press the Symbols

[00:02:27.00]

key and choose open quote. I'll type the letter C and then an end quote is added automatically. Person C received

[00:02:40.00]

eleven votes, so I'll press the Menu key and then choose Data, and then Fill Down, I'll move down to cell A24, and

[00:02:55.00]

then press the Enter key. Now I'll name the column by pressing the up arrow key until I've highlighted the title cell,

[00:03:03.00]

which is the cell at the very top of column A. I'll call this column Votes by typing "V-O-T-E-S", and then pressing Enter.

[00:03:21.00]

I'll insert the data and statistics application by pressing the Home key, and then choosing Data and Statistics. The

[00:03:32.00]

screen that you see here is called a Case Plot. It allows for exploration of the data by clicking on a point to see

[00:03:40.00]

the full description of the data, or changing the caption to look at grouping by variable. I can click on the axes

[00:03:49.00]

to assign a variable, or I can click and drag a point to allow the software to begin grouping the data based on

[00:03:58.00]

the caption. As I drag the point, the dots arrange themselves into a dot chart. To view this data as a bar graph, I'll

[00:04:10.00]

press Menu, then choose Plot Type, and then Bar Charts. Now I can more easily graphically compare A, B, and C. If

[00:04:25.00]

I wanted to compare A, B, or C as a percentage of the whole instead, I could view this data as a pie chart by pressing

[00:04:33.00]

Menu, and then choosing Plot Type, and then selecting Pie Chart.

[00:04:44.00]