

### Making Qualitative Bar Charts from a List 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 "Bar Chart".
4. Make sure "Counts of unique values" is selected from the drop-down list under "Bars represent".
5. Make sure "Simple" is highlighted and then click on "OK".
6. Choose the variable you want to graph and click on "Select".
7. Click on "Scale", click on the "Gridlines" tab, check the box next to "Y major ticks" and then click on "OK". This step will add horizontal gridlines to the bar chart.
8. Click on the "Labels" box.
9. Under "Title:", type in a description of your data.
10. Under "Subtitle 1:", state that created the bar chart.
11. Click on "OK" in that window and click on "OK" in the next window.
12. To change the bar labels, left click on the bar labels and then click on the "Labels" tab. Click in the circle to the left of "Specified" and change whatever labels need changing in the box to the right of "Specified". Then click on "OK".
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 bar chart will appear in your Word document. If you are working in some other program, 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 paste your bar chart into the document you are currently creating.

**Example** (Navidi & Monk, *Elementary Statistics*, 2<sup>nd</sup> edition, Table 2.1, page 36, 1<sup>st</sup> two columns):  
The table below shows a sample of credit cards used at a retail store.

Discover	Visa	Am. Express	Visa	MasterCard
Visa	Visa	MasterCard	MasterCard	MasterCard
Visa	Visa	MasterCard	Am. Express	Visa
Am. Express	Visa	Am. Express	Discover	Discover

Open Minitab and enter the data under C1. A portion of the entered data is shown below left.

Label the column "Credit Card". The figure below gives a partial display of what the data will look like in Minitab. Since the data is qualitative, Minitab inserts a T next to the column label, C1.

Click on "Graph" and then click on "Bar Chart". Make sure "Counts of unique values" is below "Bars represent:" and also that "Simple" is selected. Then click on "OK". Click in the box under "Categorical variables:", then choose C1 in the box at the left and click on the "Select" button.

Now click on "Scale" and click on the "Gridlines" tab. Check the box next to "Y major ticks" and then click on "OK".

Next click on the "Labels" button. Enter a description of the data like "Credit Cards Used for a Sample of 20 Shoppers" under "Title", and enter "created by *your name*" under "Subtitle 1:". Now click on "OK" in that window and "OK" in the window below.

↓	C1-T	C2
	<b>Credit Card</b>	
1	Discover	
2	Visa	
3	Am. Express	
4	Visa	
5	MasterCard	
6	Visa	
7	Visa	
8	MasterCard	
9	MasterCard	
10	MasterCard	
11	Visa	
12	Visa	

When the graph appears, you may change the titles or the labels. In this case, I want to change first bar label from “Am. Express” to “American Express”. To do that double click on the label on “Am. Express” and then in the window that appears, click on the “labels” tab. Click in the circle next to “Specified” and then in the box to the right of “Specified” change “Am. Express” to “American Express”. Then click on “OK” and the revised label will appear.

To insert the graph in a Word document, right click on the graph and then choose “Send Graph to Microsoft Word”. To copy the graph somewhere else, just right click on the graph and choose “Copy Graph”.

The completed graph is shown below.

