**Pie Charts**  (References to Moore’s BPS, 5th edition.)

**Minitab.**

Choose **Graphics > Pie Chart**

At the top of the dialog box you are given a choice of “Chart raw data” or “Chart values from a table”

<table>
<thead>
<tr>
<th>Summarized data, as in Example 1.2</th>
<th>Warning: For this to be correct, you must include all categories, so the data given are 100% of all the data.</th>
</tr>
</thead>
</table>
|                                   | Choose “Chart values from a table.”  
In the two boxes  
Categorical variable: the column with the category names  
Summary variable: the column with the summary numbers  
The numbers will be treated as counts, and percents computed from them, so they will automatically sum to 100%. |
| Full dataset, as in Large Datasets, reading.dat | This will assume you are giving it the entire dataset, so the data given are 100% of all the data.  
“Chart raw data”  
In the one box, called Categorical Variables, enter the column with the data about this variable. Here that is “Sex.” |

**CrunchIt**

Choose **Graphics > Pie Chart.** At the top of the box, you will choose either “Get Frequencies” or “With Data”.

| Summarized data, as in Example 1.2 | “With Data”  
In the two columns, make Labels to be the list of category names and Data to be the list of numbers. The numbers will be treated as counts, and percents computed from them. Both the original numbers and the computed percents will be shown. |
|-----------------------------------|--------------------------------------------------------------------------------------------------|
| Full dataset, as in Large Datasets, reading.dat | “Get Frequencies”  
In the one column, choose the column with the data about this variable. Here that is “Sex.” |