

Creating a chart using Microsoft Office Excel 2003

Data in a spreadsheet

Enter the data to be graphed in a spreadsheet.

	Total Population-2000	# Children Under 18-2000	# of Families with Income \$0-\$39,999	Total # of Families-2000	Total # of Female-Headed Families-2000	# of Female-Headed Families with children Under 6 years only	# of Female-Headed Families with children ages Under 6 years and 6 to 17 years	# of Female-Headed Families with children ages 6 to 17 years only	Available Child care*
1 Database									
2									
3									
4 Bon Homme	7,260	1,595	997	1,786	135	13	11	58	14
5 Clay	13,537	2,994	1,298	2,720	395	101	35	172	16
6 Hutchinson	8,075	1,924	1,216	2,193	139	11	9	51	7
7 Lincoln	24,131	6,764	1,897	6,669	591	95	50	264	58
8 Turner	8,849	2,166	1,092	2,478	197	17	16	92	15
9 Union	12,584	3,223	1,198	3,520	31	53	29	132	15
10 Yankton	21,652	5,297	2,367	5,407	690	146	80	260	47
11 South Dakota	754,844	192,410	87,767	194,330	26,205	4,332	2,844	10,469	1,304
12	* Includes Out Of School Programs								
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Highlight data to be graphed. Highlight the columns with the county names, and the number of Female Headed Families with children under age 6 years only, number of Female Headed Families with children age under 6 years and ages 6 to 17, and number of Female Headed Families with children ages 6 to 17 only.

	Total Population-2000	# Children Under 18-2000	# of Families with Income \$0-\$39,999	Total # of Families-2000	Total # of Female Families-2000	# of Female Headed Families with children Under 6 years only	# of Female Headed Families with children ages Under 6 years and 6 to 17 years	# of Female Headed Families with children ages 6 to 17 years only	Available Child care*
Bon Homme	7,260	1,595	997	1,786	135	13	11	38	14
Clay	13,537	2,394	1,298	2,720	395	101	35	172	16
Hutchinson	8,075	1,924	1,216	2,193	139	11	9	31	7
Lincoln	24,131	6,764	1,897	6,669	591	95	50	264	38
Turner	8,349	2,166	1,092	2,478	197	17	16	92	15
Union	12,584	3,225	1,198	3,520	31	53	29	132	15
Yankton	21,652	5,297	2,367	5,407	680	146	80	280	47
South Dakota	754,844	192,410	87,767	194,330	26,205	4,332	2,844	10,469	1,304

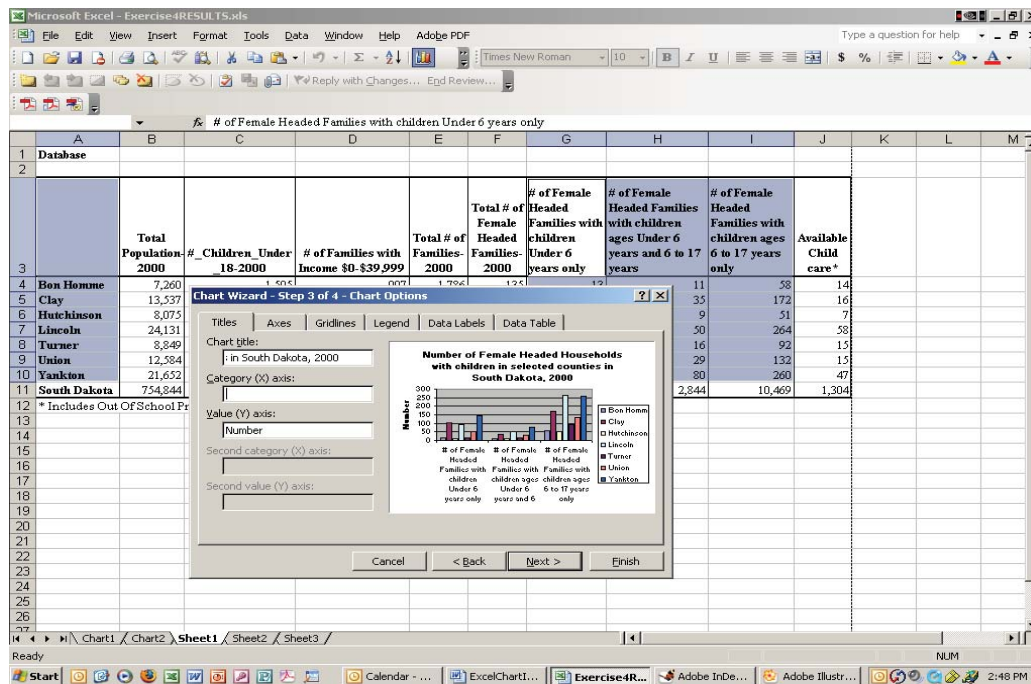
Note: For this example a non-adjacent range of data was used, e.g., data that is not next to each other – the counties and number of females. Select A3:A10 with the mouse (include the blank cell), then hold down the Ctrl key while selecting G3:I10.

Chart Type

Click on the Chart Wizard button on the Standard toolbar.



The Chart Wizard box opens to select Chart type.



What type of chart do you want?

Bar Graphs

The Bar graph displays the real-time value of specific variables and is mainly used for comparisons. Bar graphs consist of an axis and a series of labeled horizontal or vertical bars that show different values for each bar. The numbers along a side of the bar graph are called the scale. A double bar graph gives two pieces of information for each item on the vertical axis, rather than just one.

Line graph

A line graph is a way to summarize how two pieces of information are related and how they vary depending on one another. The numbers along a side of the line graph are called the scale. The line graph follows a set of data over time and is used for analyzing trends in a specific variable.

Pie Charts

A pie chart is a circle graph divided into pieces, each displaying the size of some related piece of information. Pie charts are used to display the sizes of parts that make up some whole.

After you have selected the Chart type you can click and hold your mouse pointer down on the Press and Hold to View Sample button to see what the data looks like in the chart type selected. You can do this with each chart type to get the chart you want to display the data.

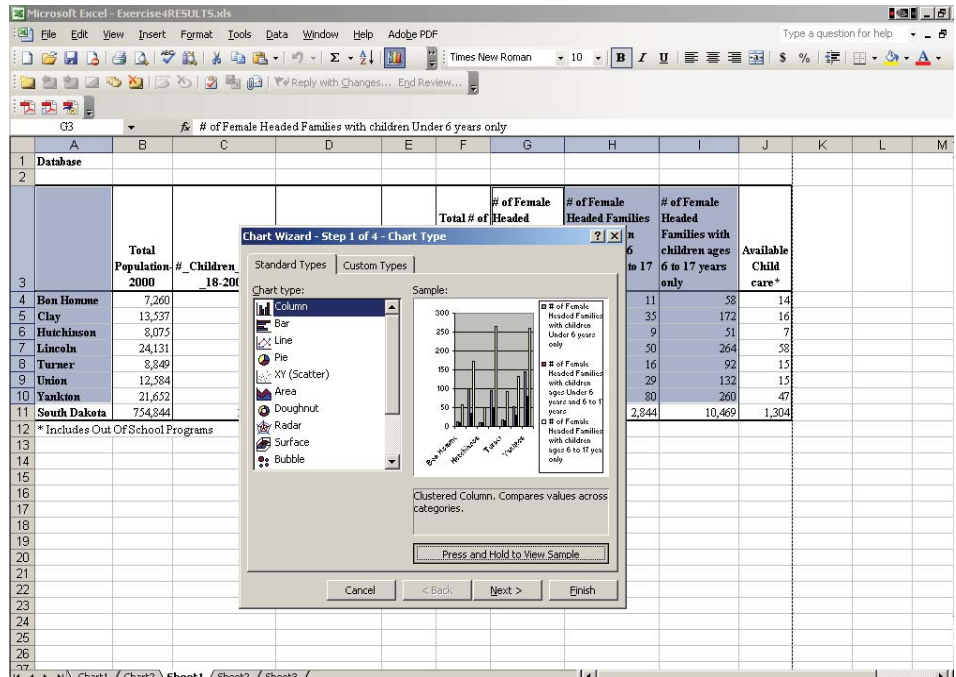
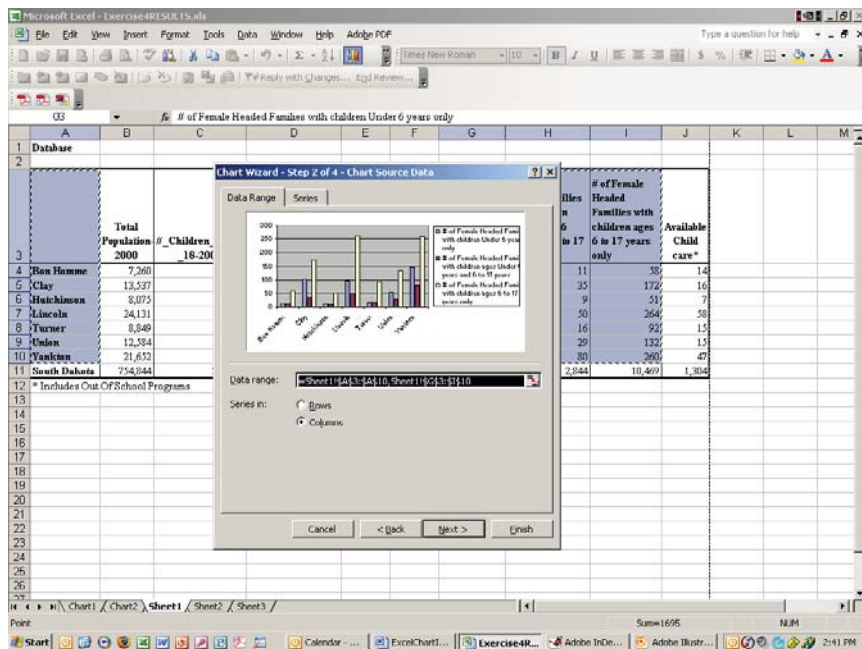


Chart Source Data

After selecting the chart type click on Next. Step Two verifies the range of data being used for the chart. The Data range displayed below is read “all cells from A3 to I10.”

You can choose to display the data by columns or by rows.

You need to decide which chart best reflects what you want to say with the data.



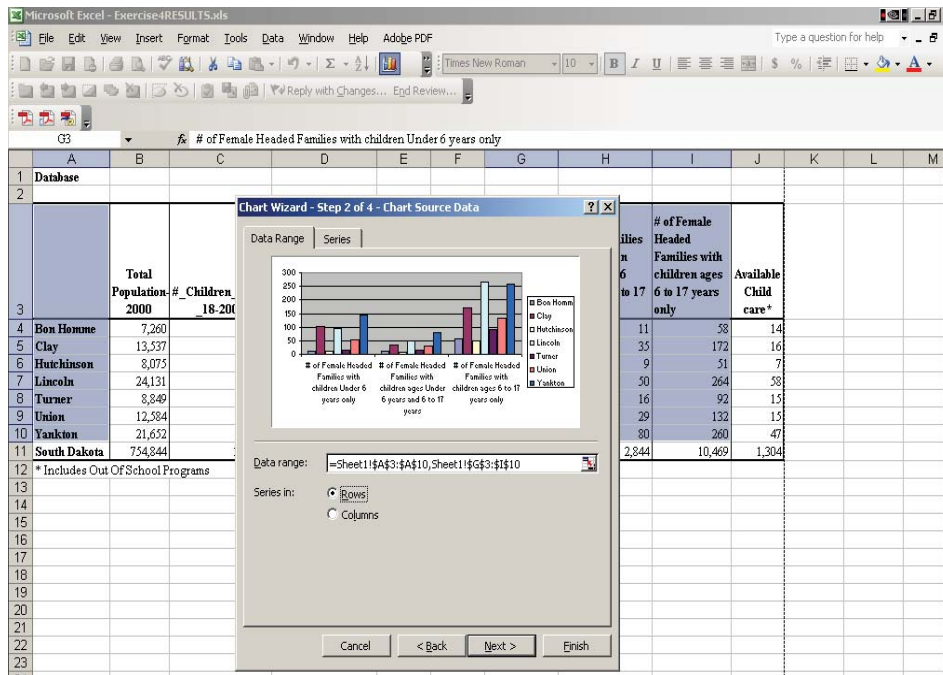
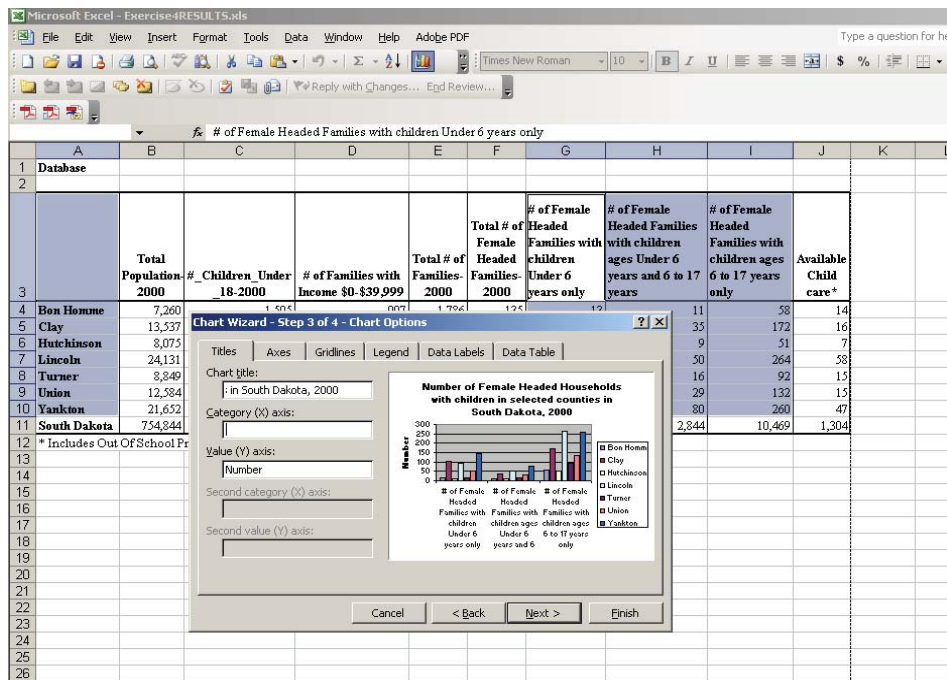


Chart options

Click on Next to go to step three of the chart wizard. This step allows you to add a title to the chart, a legend, a data table, and data labels.



A graph or chart should be complete. All necessary information should be on it so that by itself, the graph is self-explanatory. It should have a title and axes should be labeled.

More than one curve or line can be drawn on a single graph for purposes of comparison. The lines can be differentiated by color or broken and dotted lines etc. Similarly, data values can be differentiated by using different symbols, e.g. m=males, f=females.

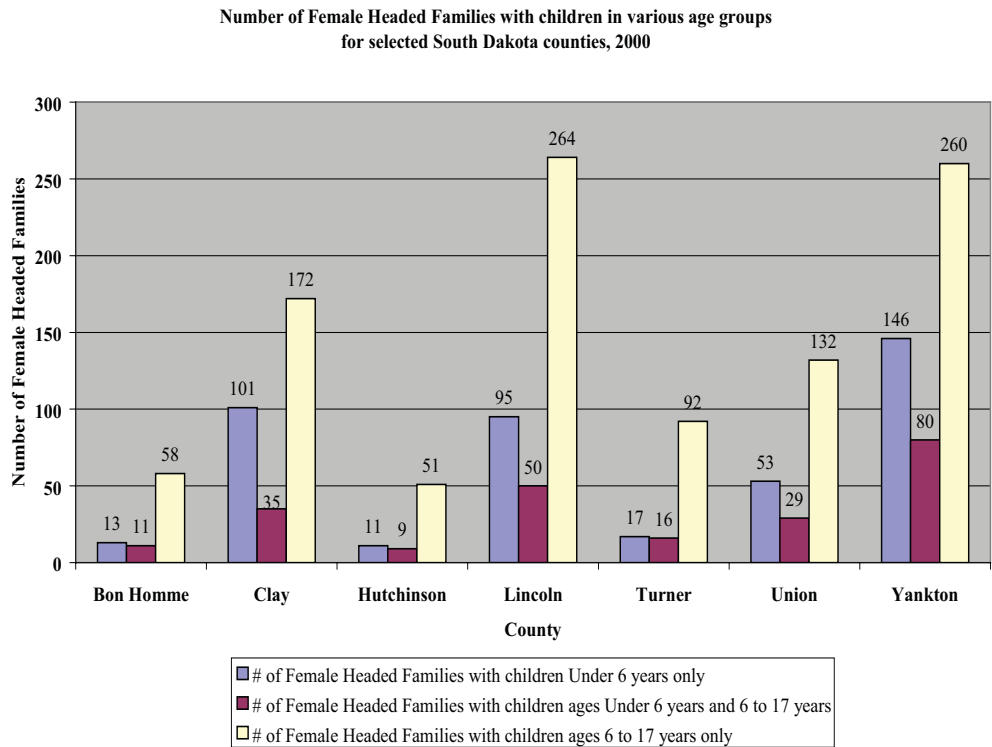
The independent variable is usually plotted on the X-axis; the dependent variable usually on the Y-axis.

Only use pie charts when showing component parts of a whole. Pie charts cannot represent values beyond 100%.

Be careful of the choice of bar chart, versus line charts. If you are looking at data over time, a line chart is usually a better depiction.

A good chart should have faint grey background grid lines.

Add in the chart title, label the axes, place the legend at the bottom,side, or top of the chart, and add data labels. Click Next> and place the chart As new sheet. It should look similar to this:



If you chose rows instead of columns, your chart will look similar to this:

Number of Female Headed Families with children for selected South Dakota counties, 2000

