

Learning Basic College Mathematics – Graphing Lab

Purpose:

This week's lab is specifically designed to help us learn to create valuable mathematical images such as pie, bar and line charts that will communicate data such as market trends, customer preferences and future needs. During this two-day assignment, our small groups will choose a topic to survey, ask at least 25 individuals the survey question, collect the data, chart the values and draw the graphs. Graphs will be on display in week 8 for our peers to view.

The Question:

There are infinite topics to research in our professional life. We can ask questions like:

For our local taste, we can ask them, *“Out of the following, beef, chicken, fish, pork or vegetable, what is your preference for the main entrée of dinner?”*

For what is being served, we can ask, *“What are the main choices we have for lunch in a one mile radius of this facility.”*

For professional development, we can survey the culinarians on staff as to the extent of their education.

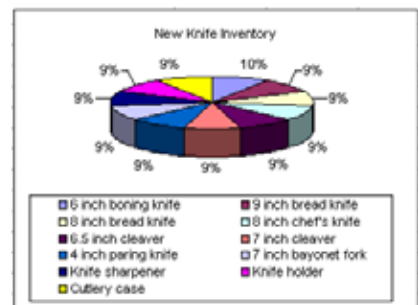
Whatever the query, write the question down so we can phrase the exact words to each person being surveyed.

Collecting the data:

Record the data given to us on paper. We may want to gather statistics about the person giving the answers such as gender, age, and experience. This is not a requirement, but the information could come in handy in the latter phase of the project.

The Pie Graph:

After collecting the data, make more than one graph to communicate the information. For those of us who do not have much time to spend on the task, the pie graph is the easiest to create. Use a computer program such as Excel to make the graph or develop the image using a circle template, protractor and color pencils. Label the pie chart, so the picture can relate the data without need of questions.



The Bar Chart:

After making a pie graph, begin to develop a bar chart to relate more than just percentages to the viewer. A bar chart will display the categories, and we will add other facts such as mode, median and mean to the mathematical values that may sway the reader that our information is important to their success.

The Line Chart and Picture Graphs:

For those professionals with a marketing flare, we can separate ourselves from the crowd by making complex mathematical images. Color picture graphs such as we see on television advertisements promoting cell phone coverage, are both informative and entertaining. The best presentation on display has multiple affects on the reader and typically results in professional satisfaction for the team constructing the artwork. Blasé graphics are often ignored, so the time spent by our teams gathering statistics may be passed over by the public and are hard work will go to waste.