5C: Statistical Tables and Graphs

Group Activity

Please complete the anonymous survey online. The link is in D2L. This will give our class some data to graph.

Types of Data

For each survey question, determine whether the data is qualitative or quantitative

1. How do you identify your gender?
2. What is your age?
3. How many credits are you taking this term?
4. What is your main mode of transportation to campus?
5. How long is your pinky finger to the nearest half-centimeter?

Frequency Tables and Graphs of Qualitative Data

For one of the sets of qualitative data, make a frequency table in Excel. Use your table to make a pie chart and a bar chart. Write a sentence or two about any patterns or observations you make from the graph.

Quantitative Variables and Histograms

For the pinky length data, make a histogram by hand and/or using Excel. Write a sentence or two about any patterns or observations you make from the graph.

Time Series Plots

The data below show the number of people diagnosed with cancer each year. Make a time series plot in Excel. Write a sentence or two about any patterns or observations you make from the graph.

United States and Puerto Rico Cancer Statistics, 1999-2013 Incidence

Year	Number of people diagnosed with cancer
1999	18,162
2000	17,982
2001	18,463
2002	18,457
2003	18,155
2004	19,058
2005	19,258
2006	19,811
2007	20,067
2008	21,120
2009	20,630
2010	20,398
2011	21,290
2012	20,739
2013	21,155

Source: https://wonder.cdc.gov/controller/datarequest/D121

5D: Graphics in the Media

Group Activity

1. Group discussion: What do you look for in a good graph?

What are some things that make graphs misleading?

2. "What's Wrong with this Picture?"

Get a set of media cards. For each graph, write as many of these as possible:

- Mistakes
- Missing information
- Misleading information

1. Unemployment Rate

2. Itch Relief

3. 2012 Presidential Run

4. Financial Return of Higher Education

5. Job and Health Insurance Losses

6. Tornadoes by Decade

7. Rasmussen Reports Poll

8. Most Touchdown Passes in NFL History

Midterm Study Ideas

What are some good ways to study for a math midterm?

Share ideas with your group. List as many as you can and star the ideas that you personally would like to use.