10.2.23

Topic: Visualizing Data

- Data Visualization → graph that helps show important patterns in a dataset
- Two types of data: quantitative and categorical
- Categorical data visualizations:
    - Bar chart → a categorical variable vs. frequency/relative frequency
        - Side by side bar chart or stacked bar chart for multiple categorical variables
    - Pie Charts
    - Pictographs
- Can make quantitative variable into categorical variable if you bin the data (put it into classes/intervals)
    - Bins don't have to be equally spaced, but be careful to make sure it won't make data misleading.
- Quantitative data visualization
    - Histograms → a quantitative variable vs. frequency/relative frequency
    - Dot plot → a quantitative variable vs. frequency
    - Stem and leaf plot → a quantitative variable vs. frequency
    - Box plot → a quantitative variable vs. relative frequency
    - Cumulative frequency graph (ogive)