

Summarizing and Graphing Data

Math 122

Hours Slept

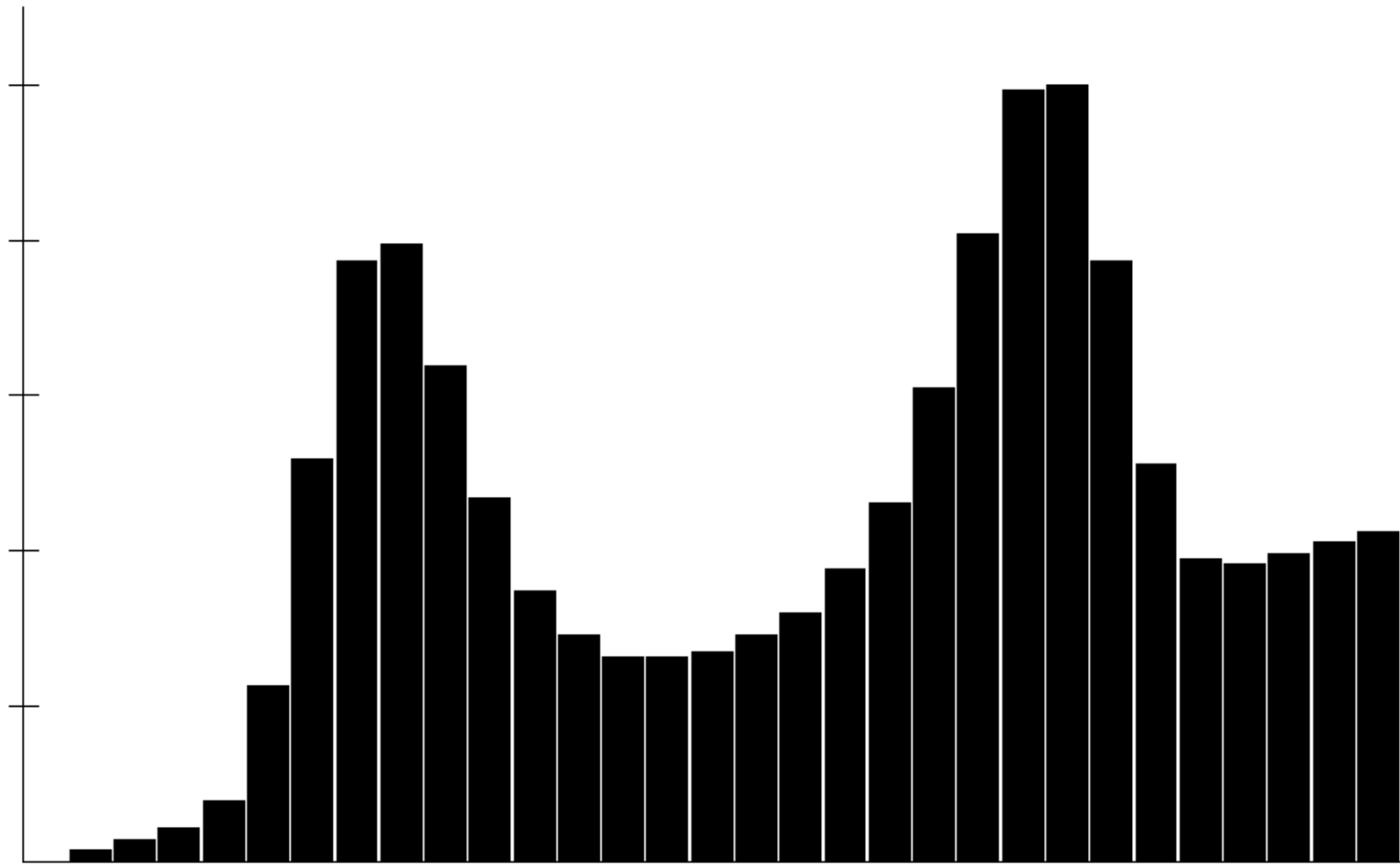
- Raw Data
- Frequency Table
- Cumulative Frequency Table
- Relative Frequency Table
- Dot Plot
- Enter Data in Calculator
- Histogram

Things To Look For in Data

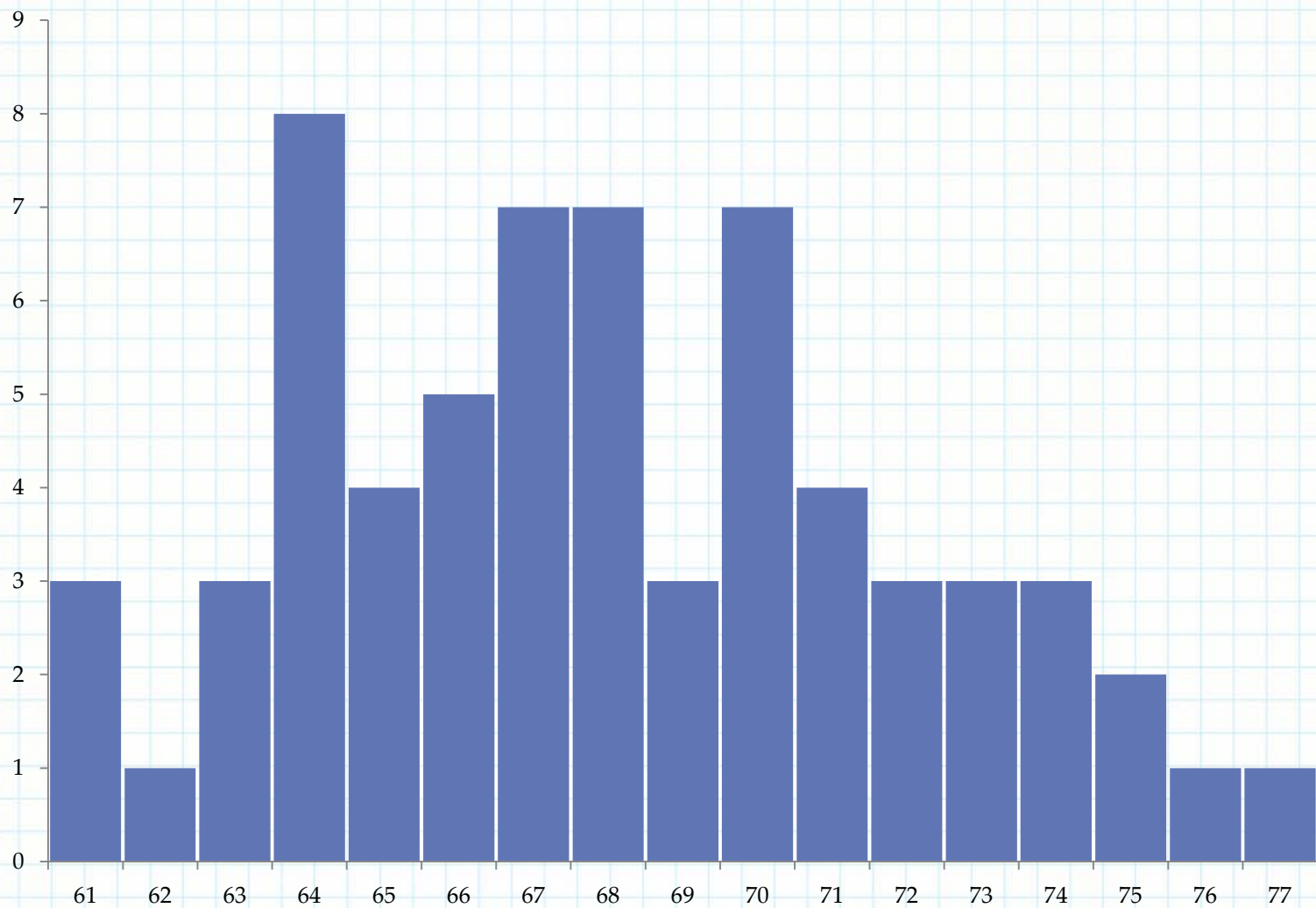
- Shape of data
- Center
- Variation

Things to Look For In Histograms

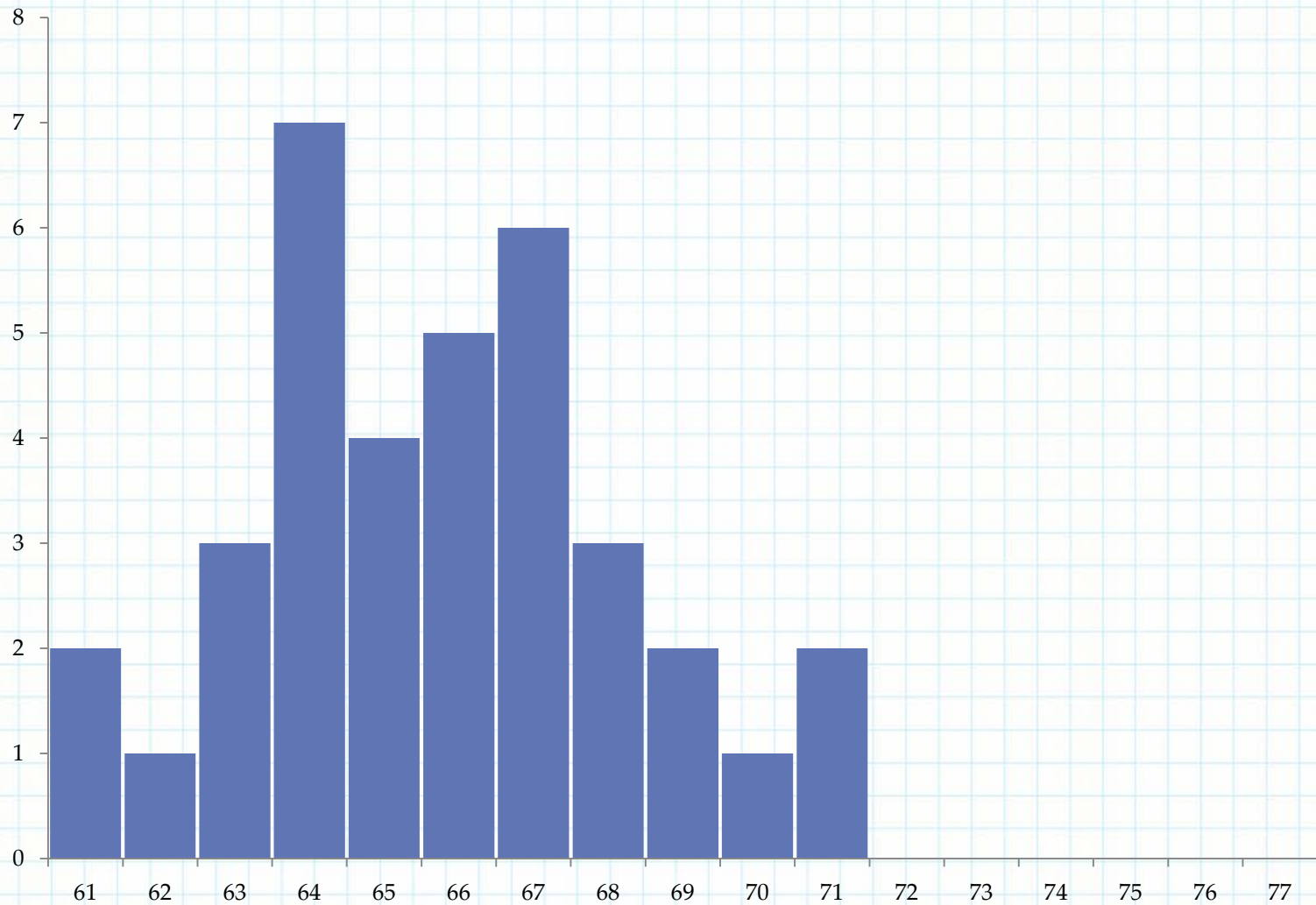
Multiple Peaks



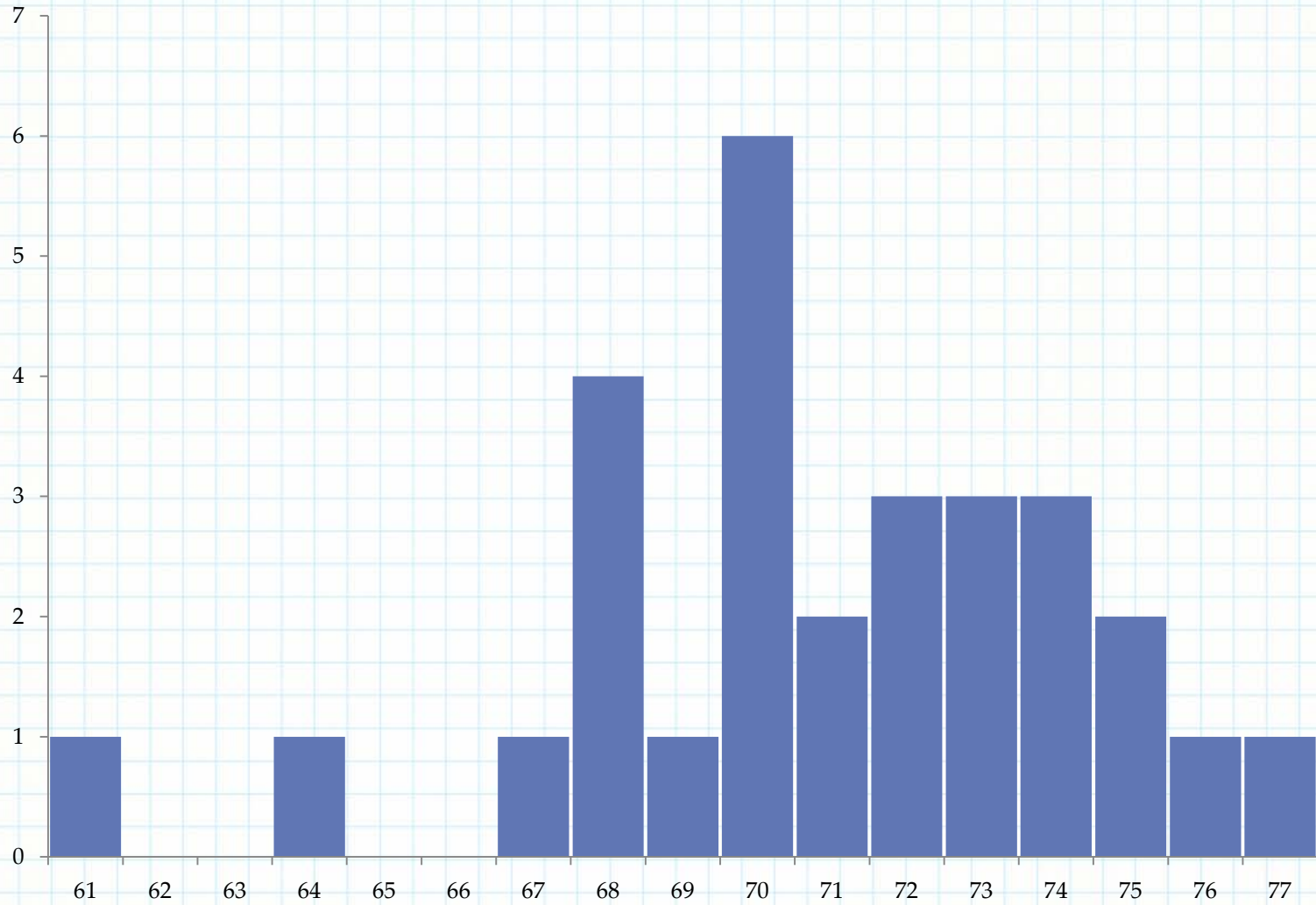
Height



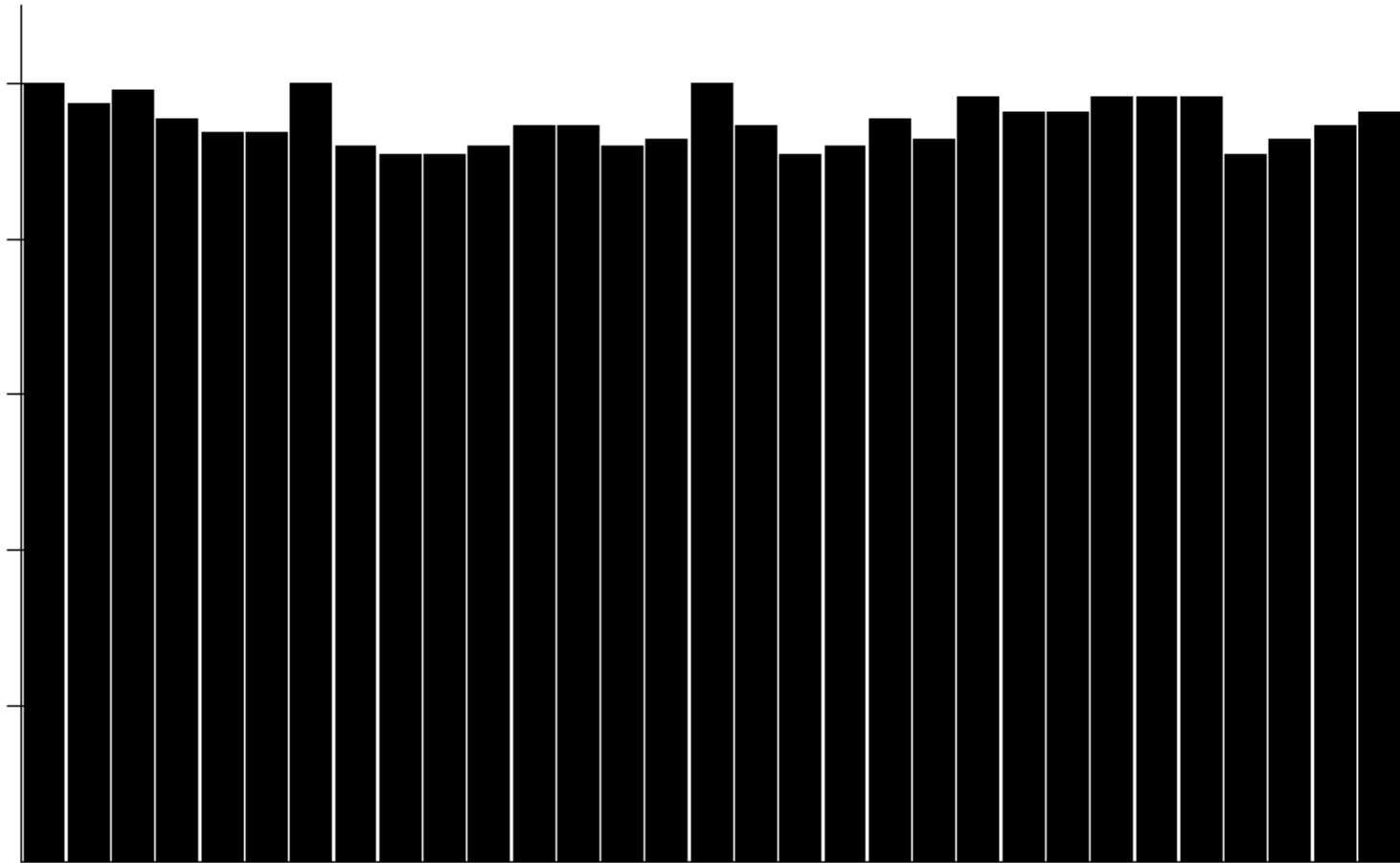
Height - Female



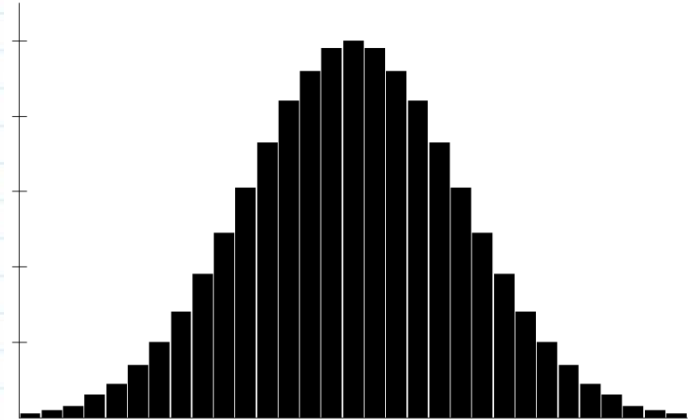
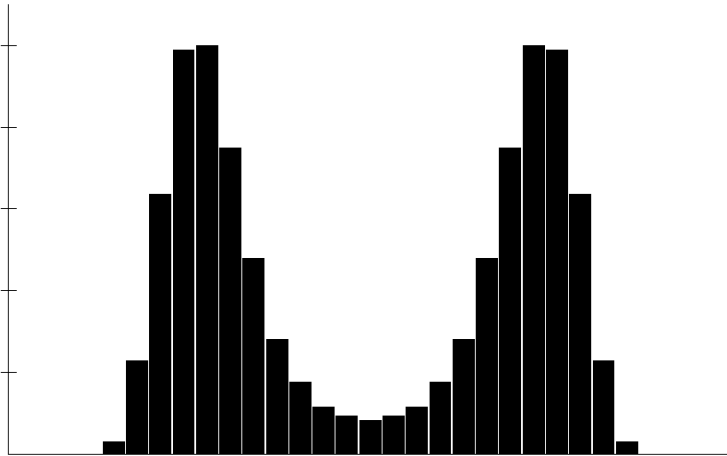
Height - Male



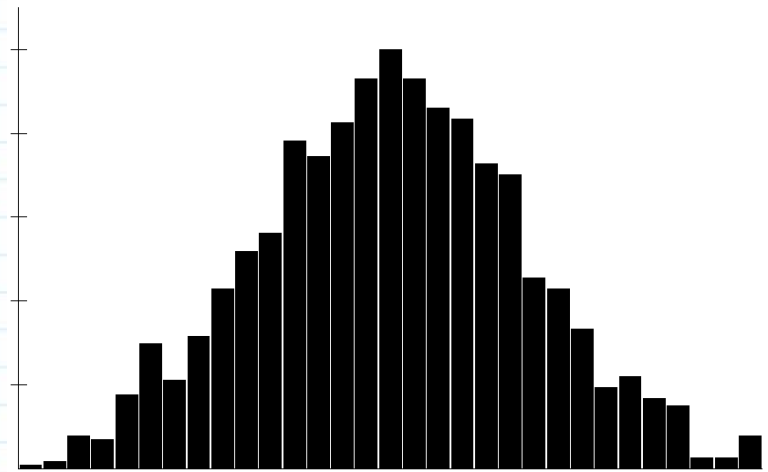
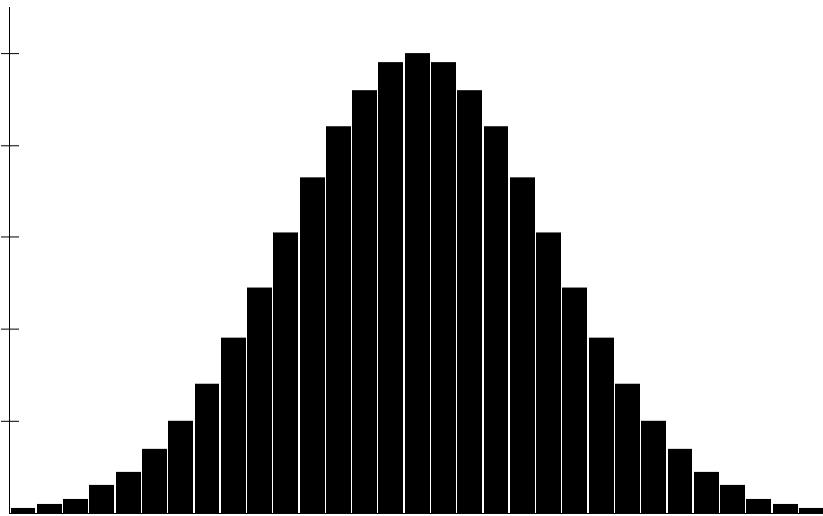
Approximately Uniform



Symmetry

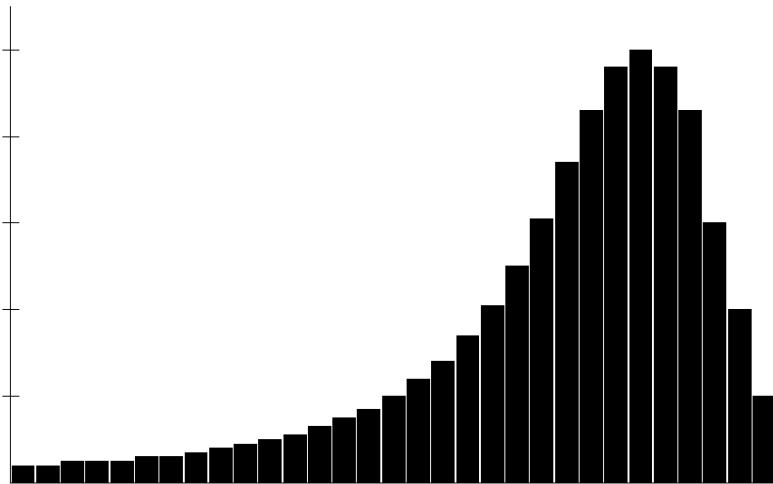


Bell Shaped -- Normal

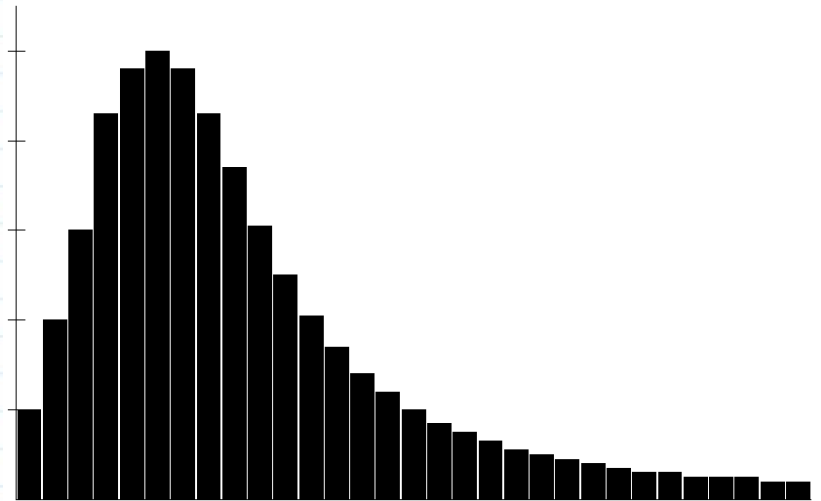


Skewness

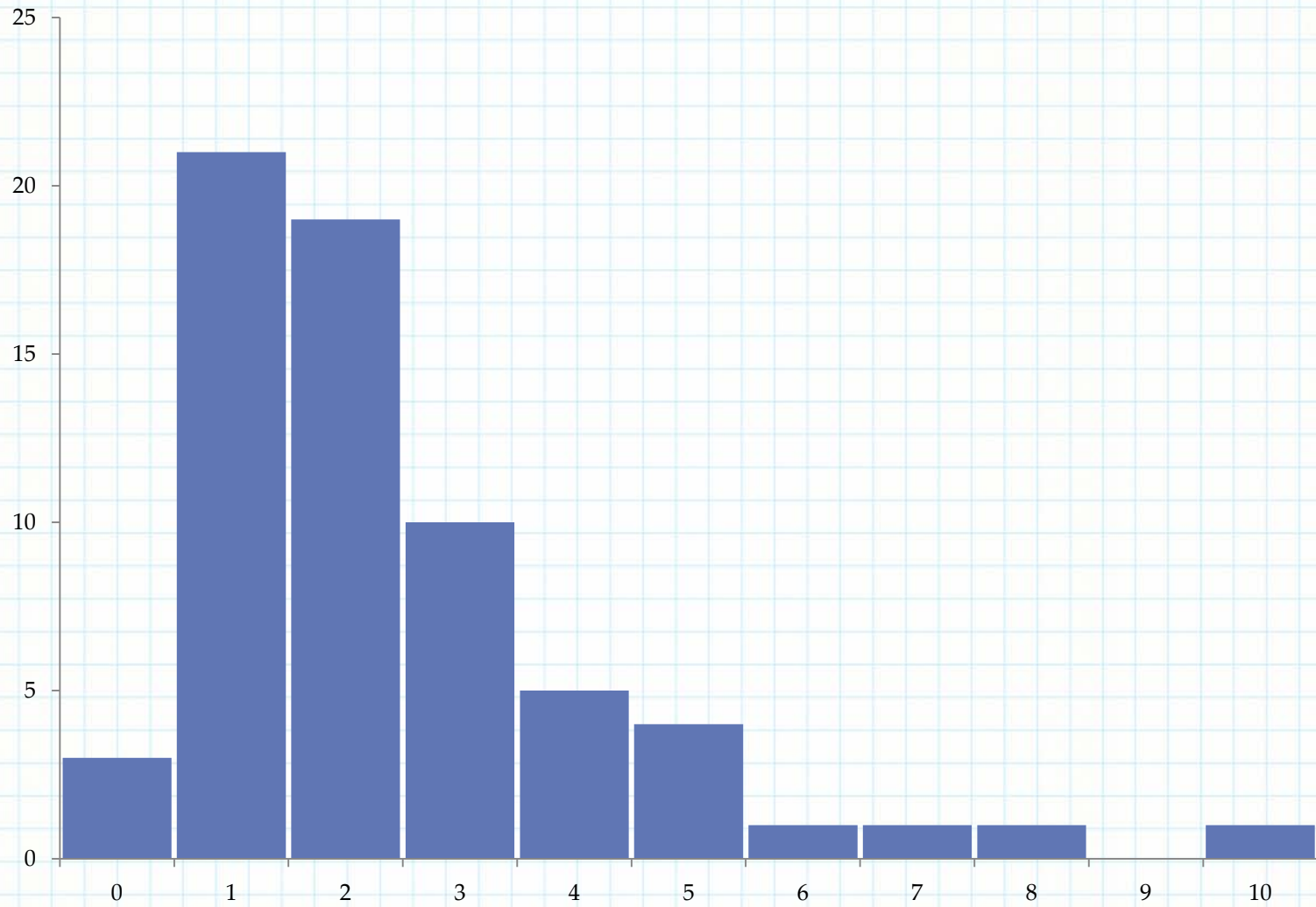
Skew Left



Skew Right

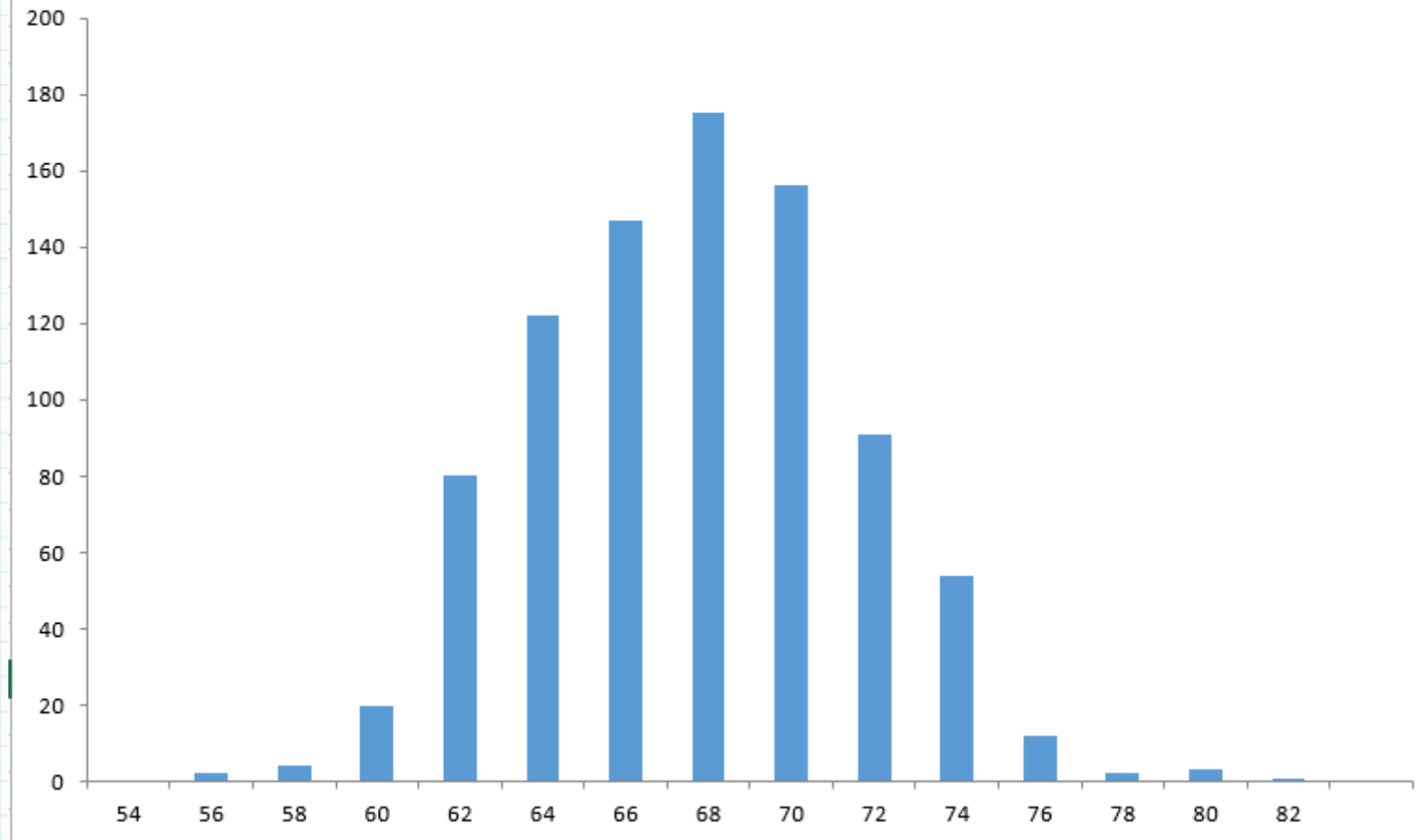


Number of Siblings

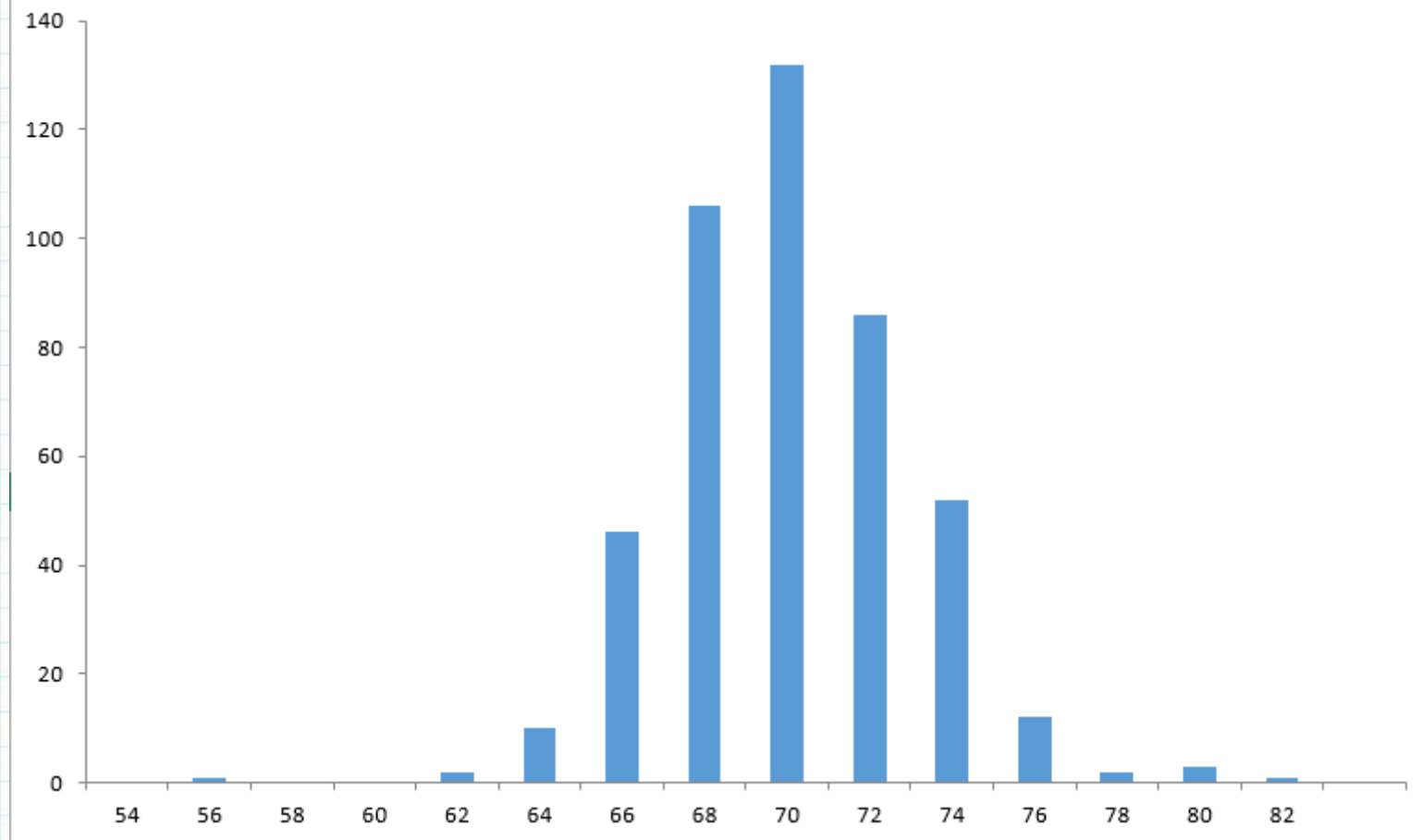


More Charts from NHANES Data

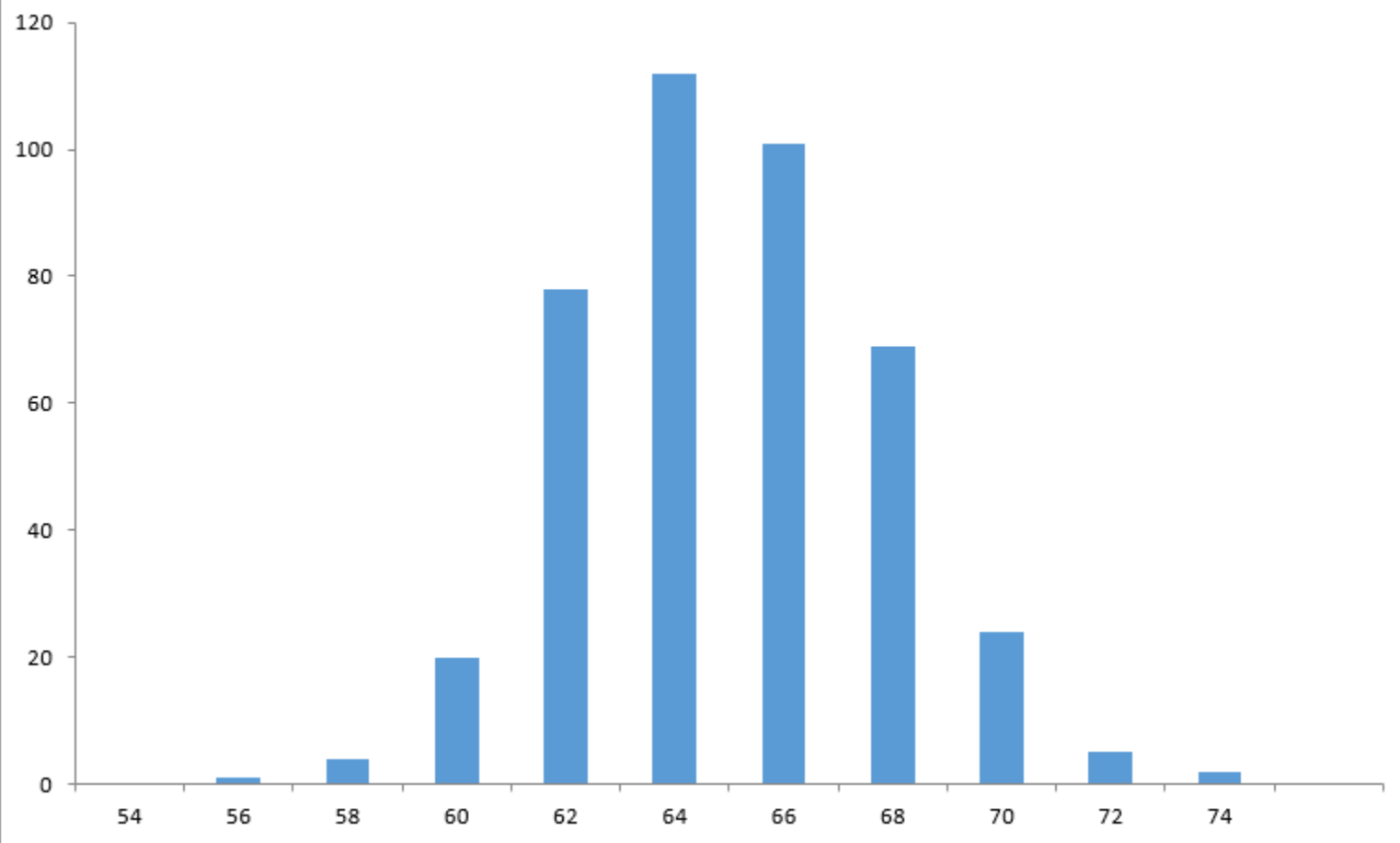
Heights ages 18-25



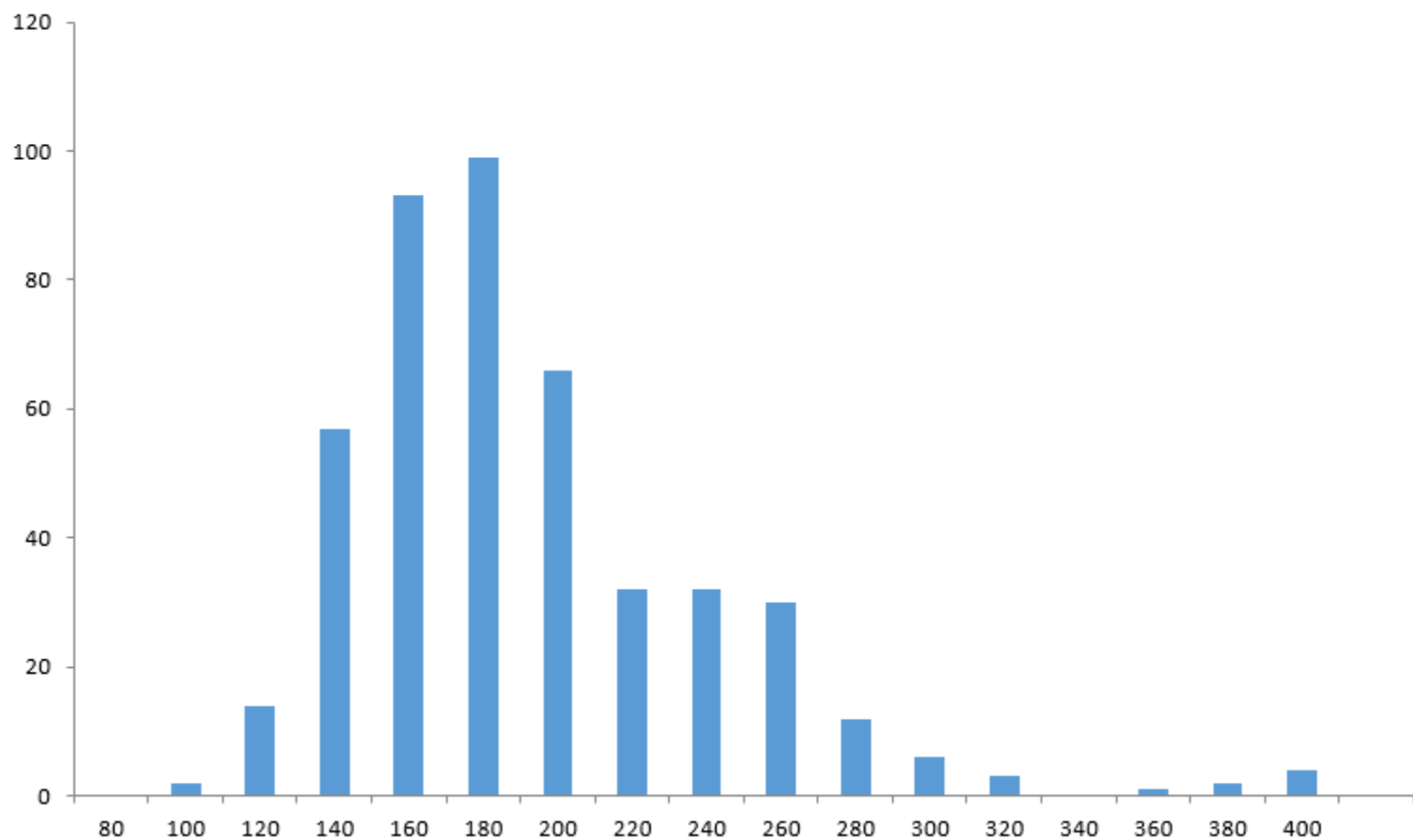
Heights of College Age Males



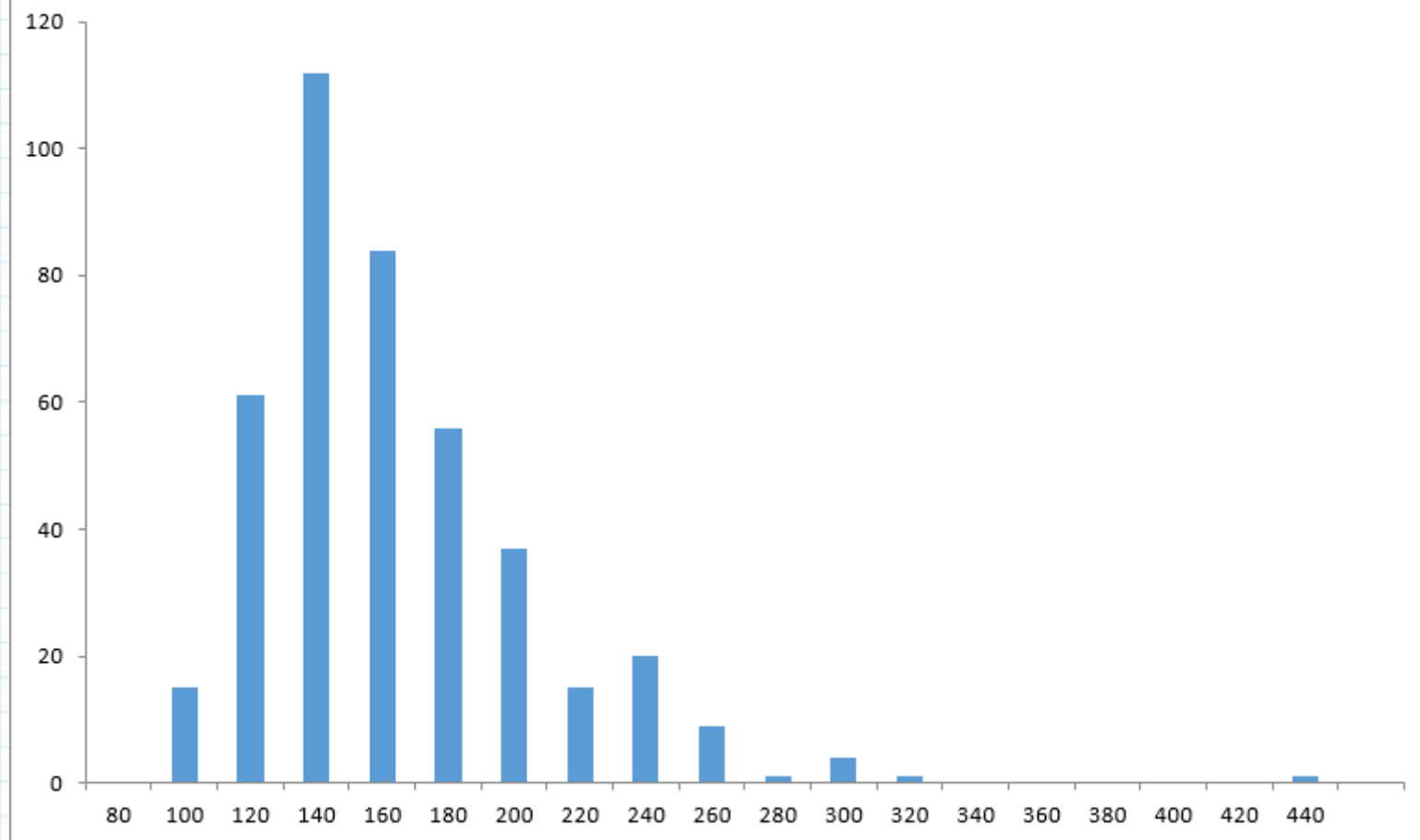
Heights of College Age Females



Weights of College Age Males



Weights of College Age Females

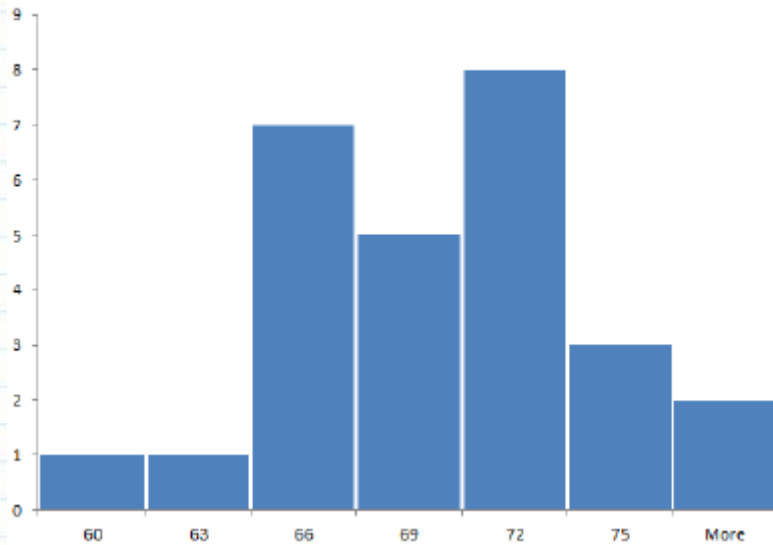


Other Statistical Graphs

Frequency Polygon

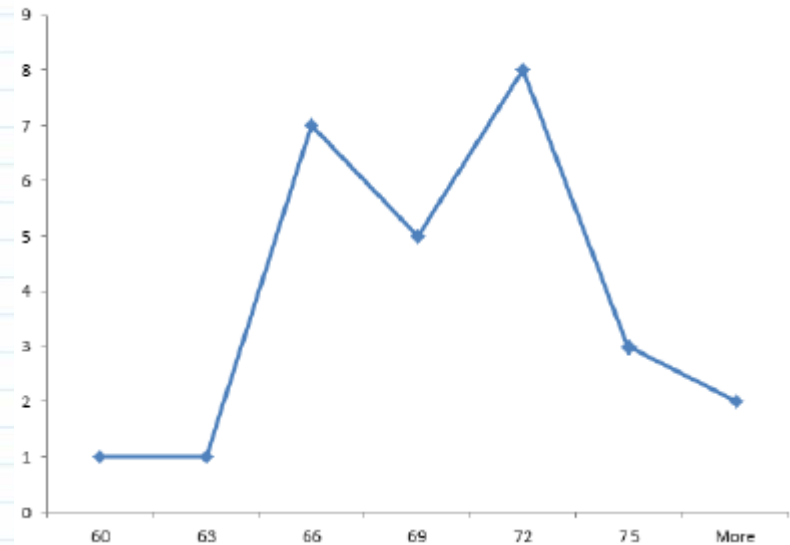
Histogram

Heights of 27 College Students

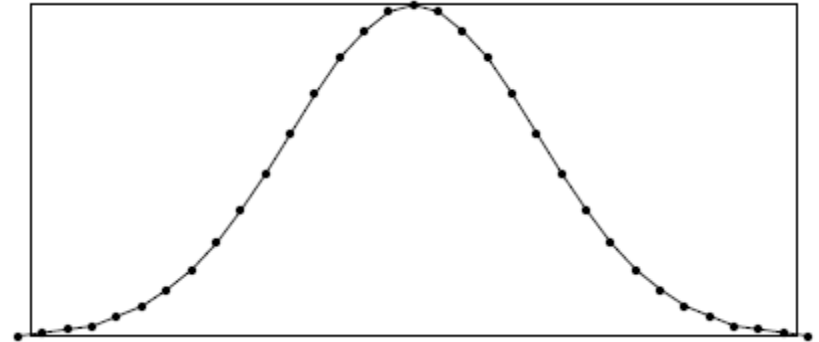
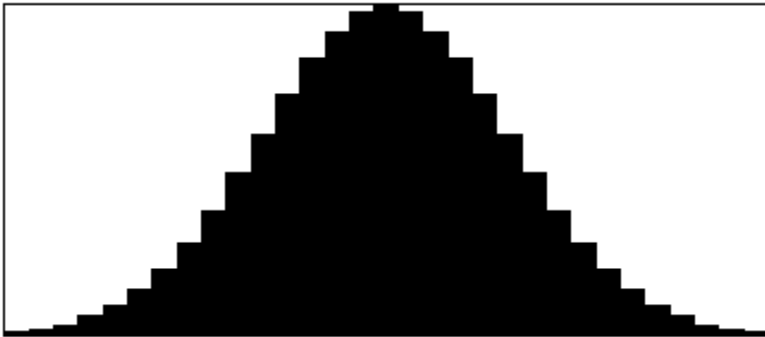


Polygon

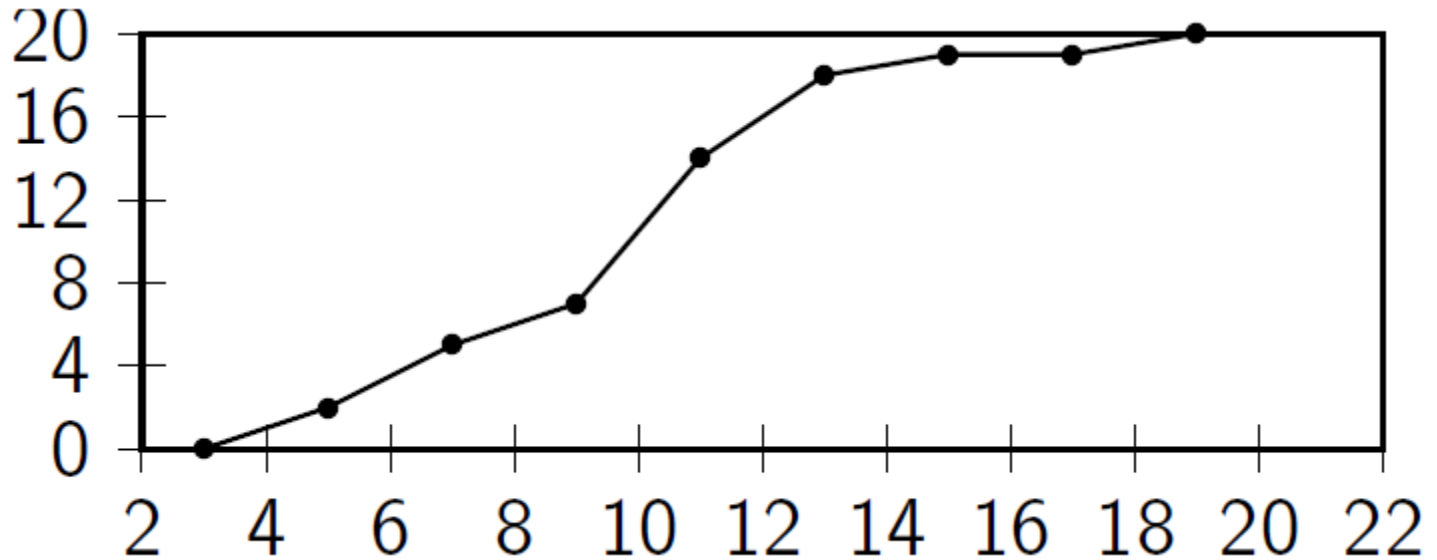
Heights of 27 College Students



Frequency Polygon

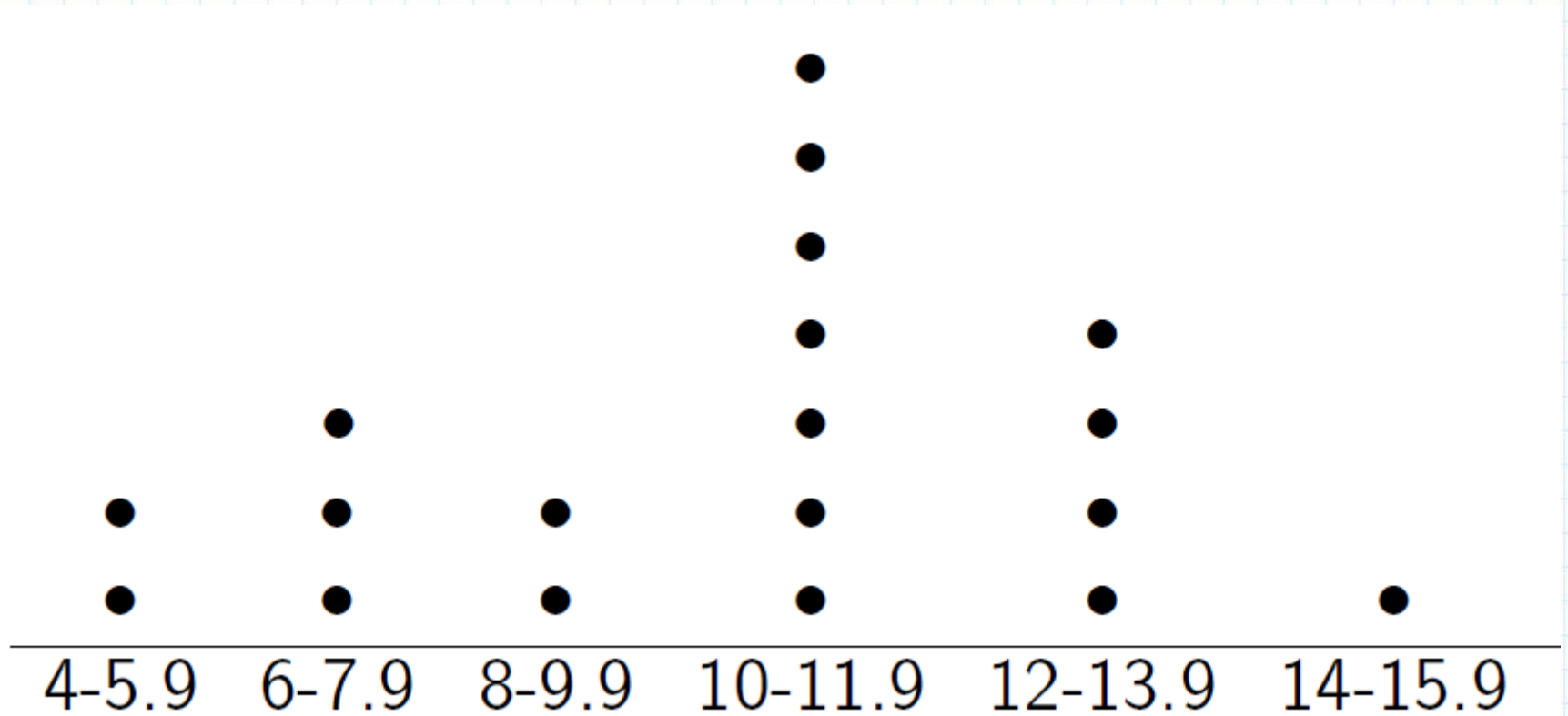


Ogive



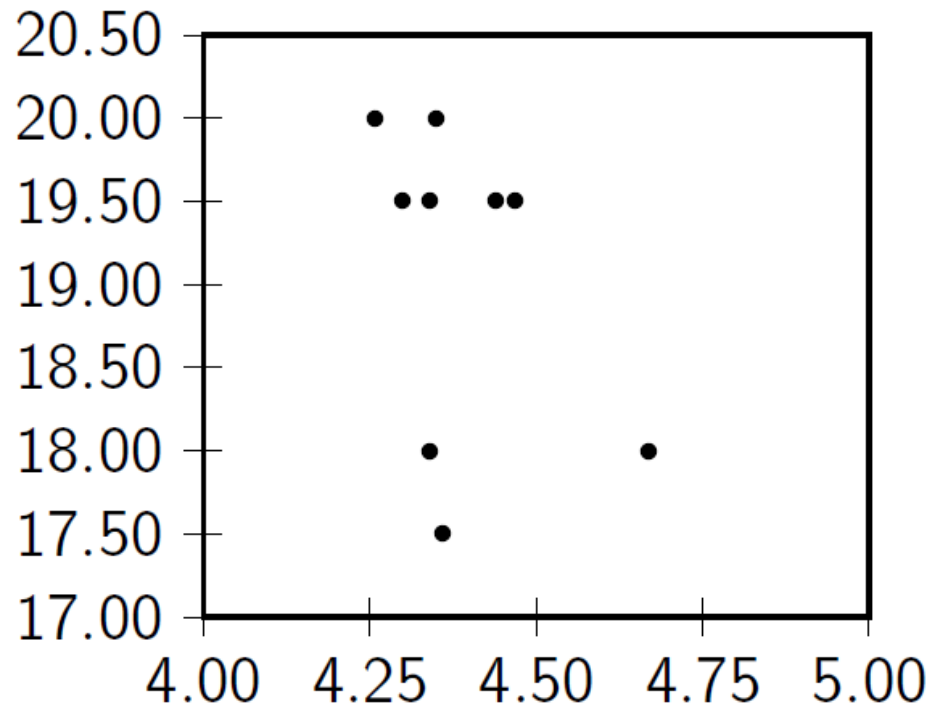
Frequency Polygon of a Cumulative Frequency Table

Dot Plot

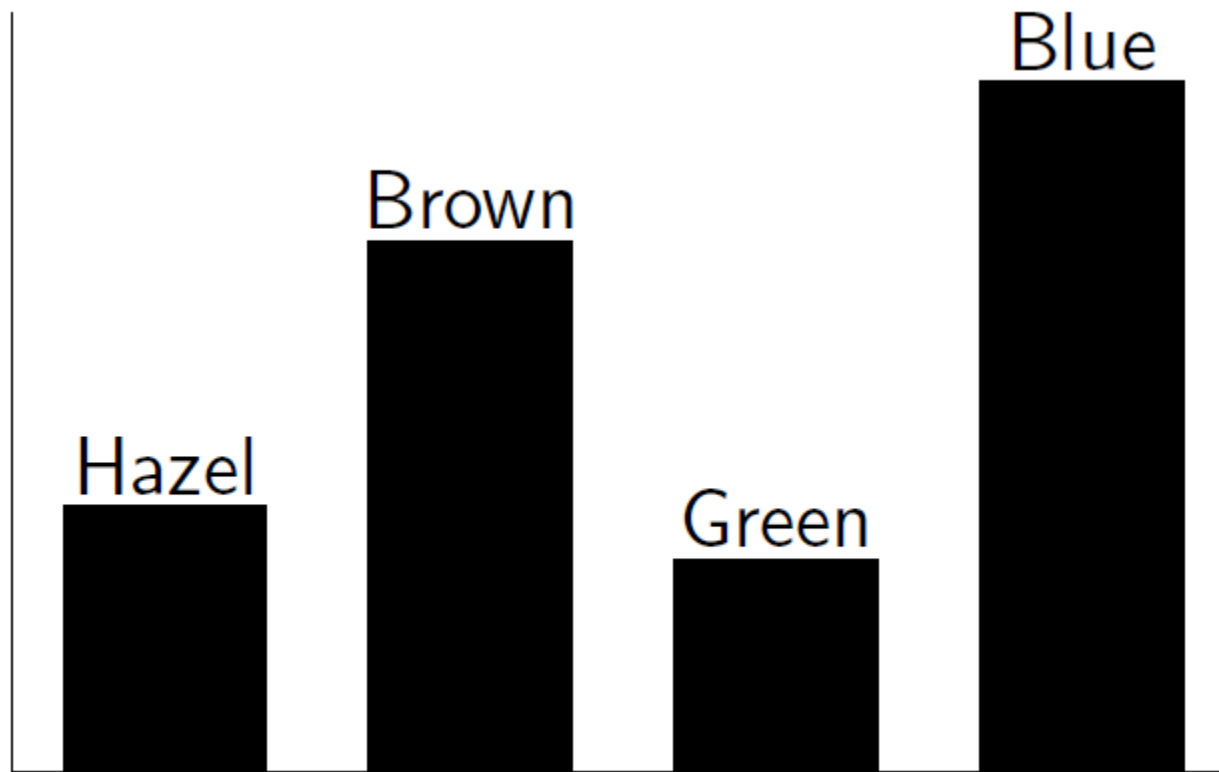


Scatter Plot

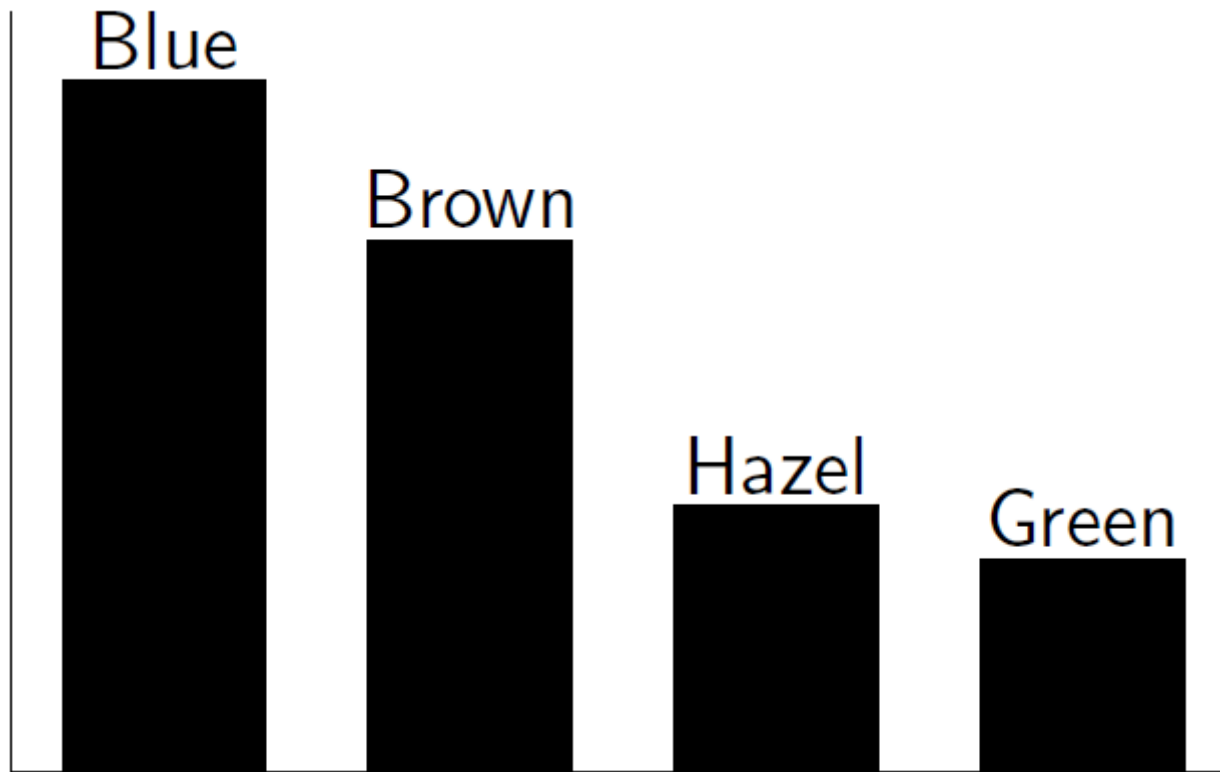
30m	4.35	4.75	4.47	4.34	4.89	4.36	4.30	4.44	4.67	4.26	4.34
Vertical	20.0	14.5	19.5	18.0	12.5	17.5	19.5	19.5	18.0	20.0	19.5



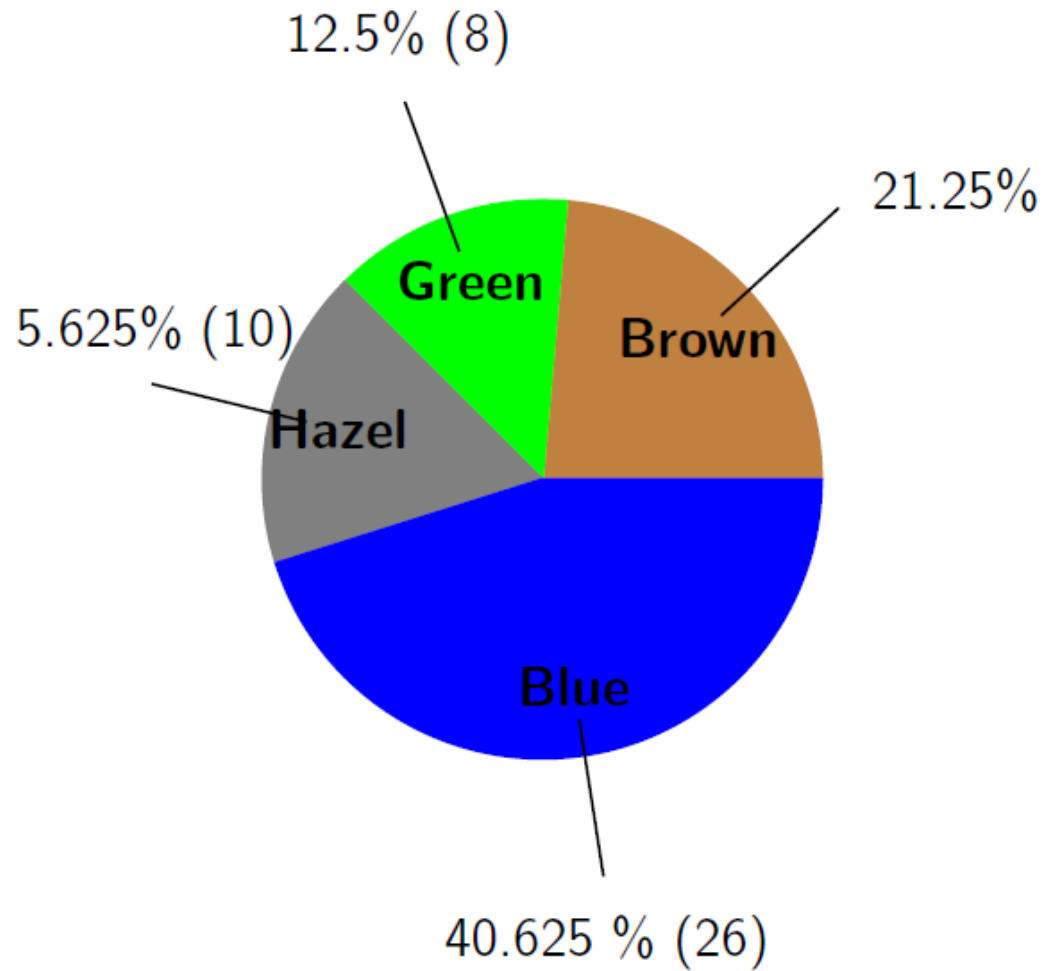
Categorical Data



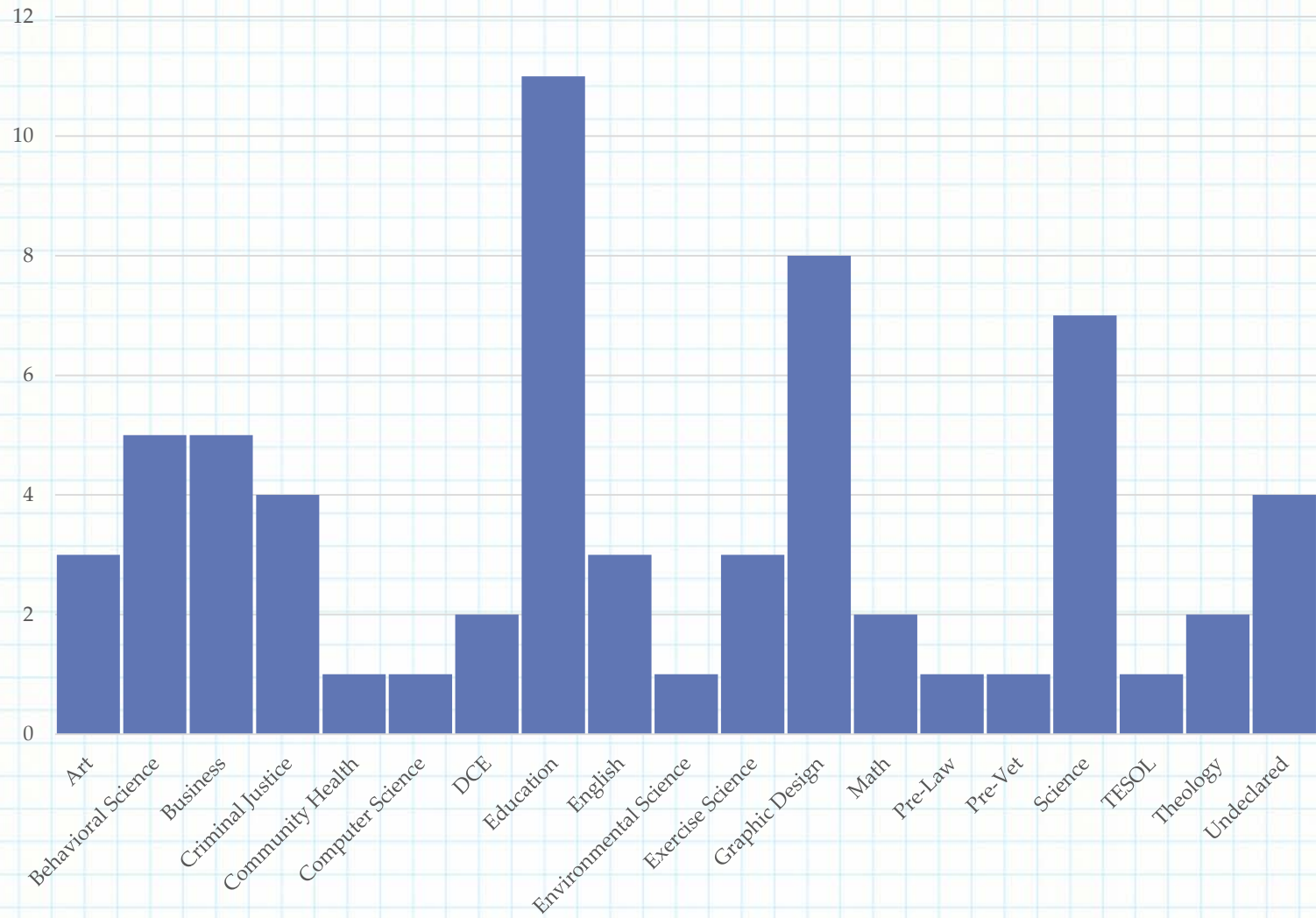
Pareto



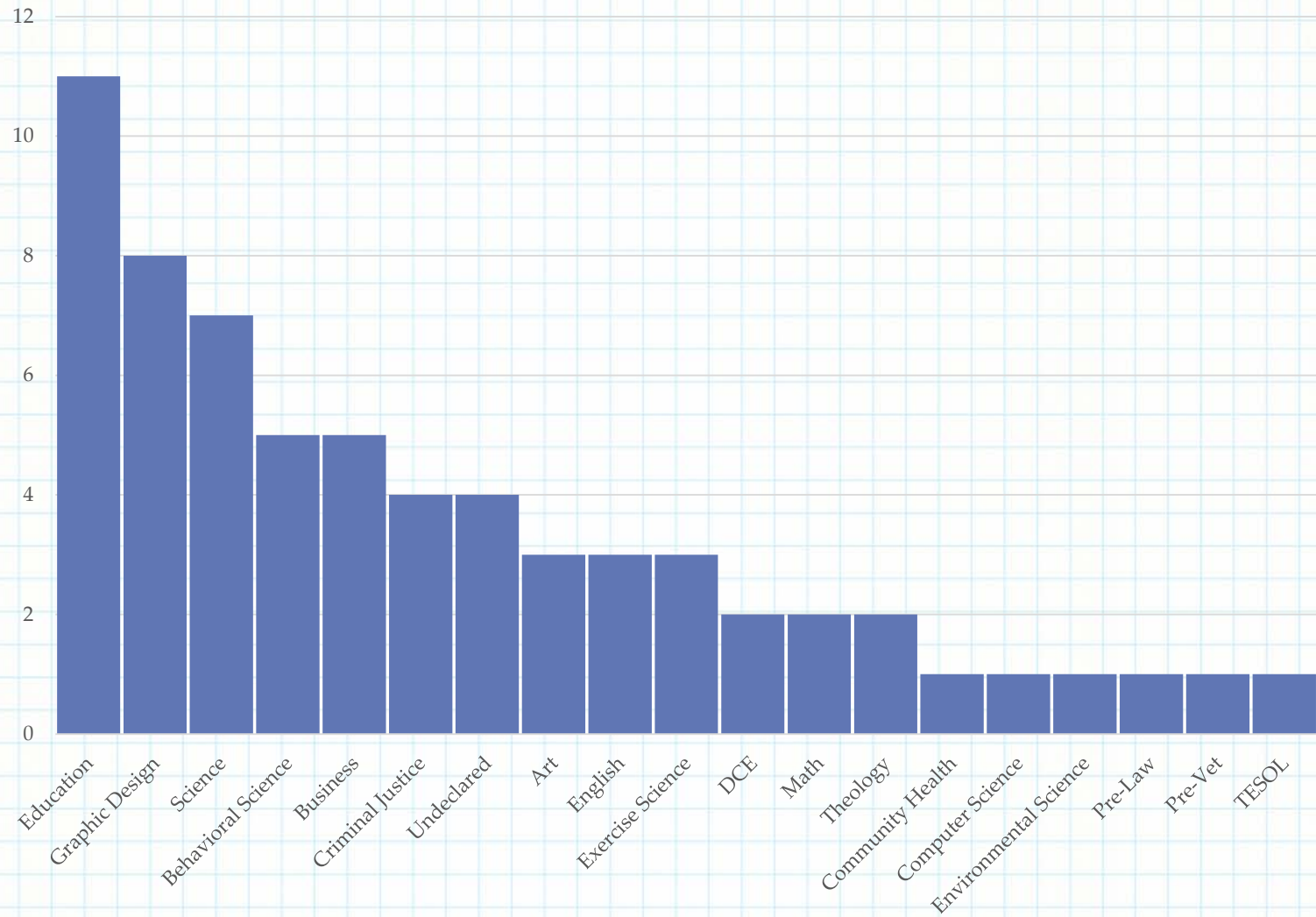
Pie Chart



Majors



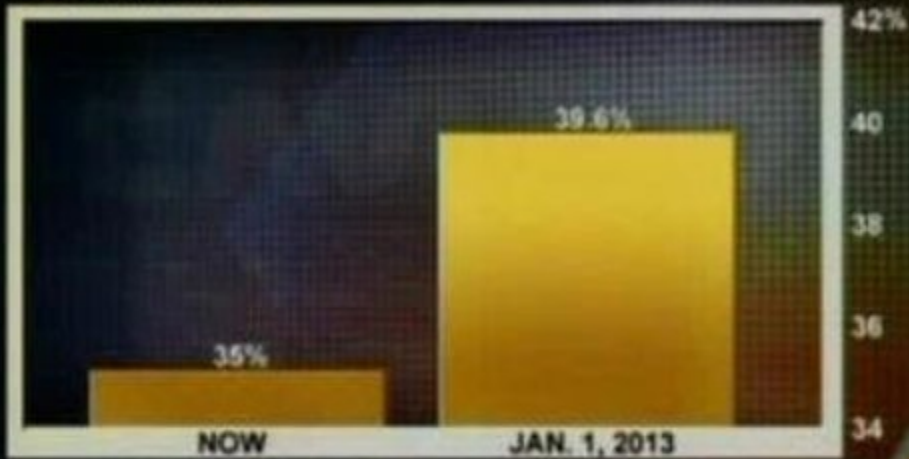
Majors



Misleading Graphs

IF BUSH TAX CUTS EXPIRE

TOP TAX RATE



8:01p ET

FOX
BUSINESS

TOP STORIES

TECHNOLOGY

CONSUMER

WITH THE JUSTICE DEPARTMENT AND ACQUIRES FULL T

DOW 13008.68 ▼ 64.33

S&P 1379.32 ▼ 5.98

NASDAQ 2939.52 ▼ 6.32

UNEMPLOYMENT RATE UNDER PRESIDENT OBAMA

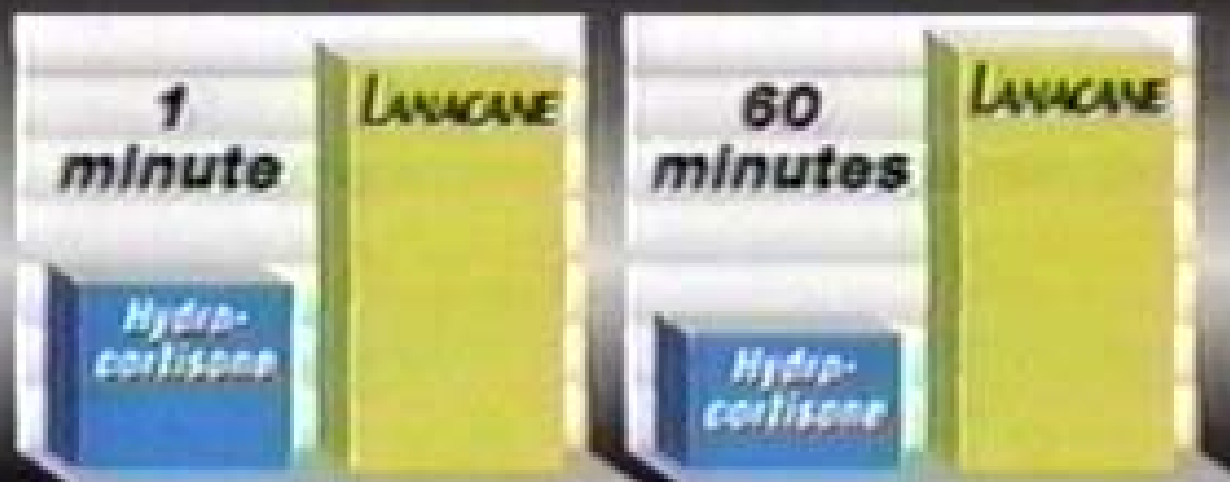


2011

SOURCE: BUREAU OF LABOR STATISTICS

EAR WAR AND A TROOP WITHDRAWAL AT THE E NAS FUT 2,292.50

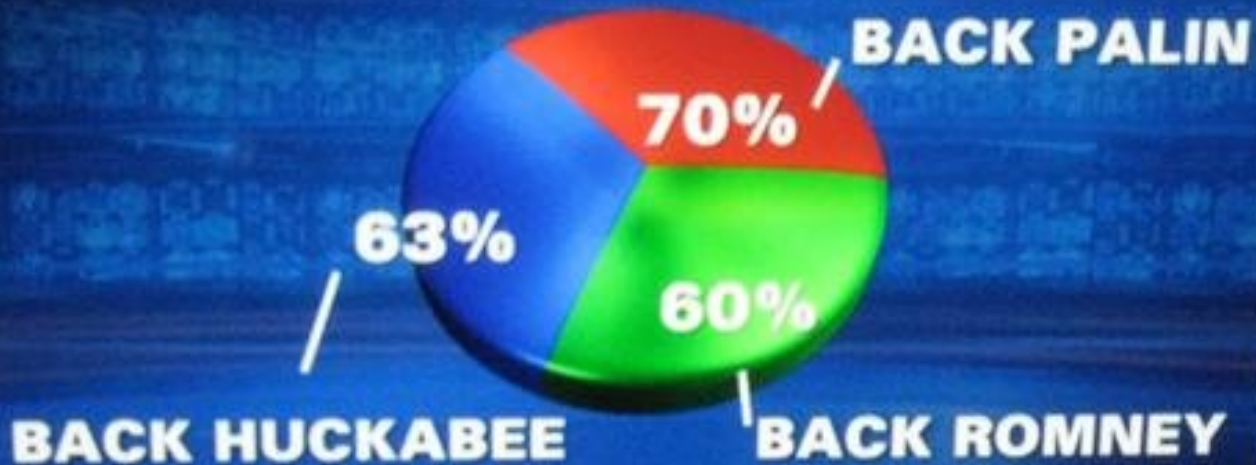
CLINICAL PREFERENCE STUDY OF **ITCH RELIEF**



DIRECT ACTION ON ITCH NERVES

2012 PRESIDENTIAL RUN

GOP CANDIDATES



FOX

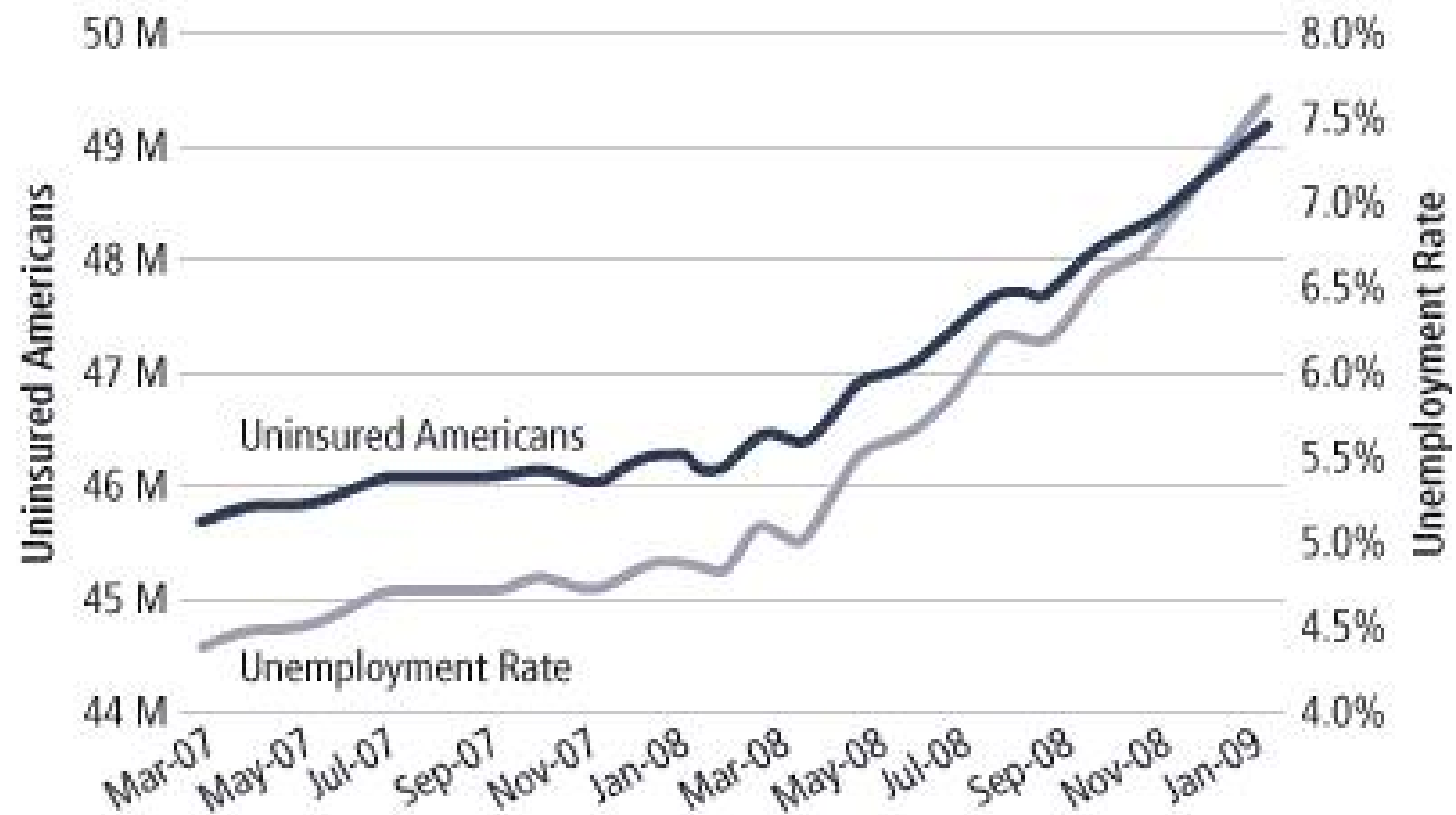
47°

SOURCE: OPINIONS

DYNAMIC

Job and Health Insurance Losses Accelerating

14,000 People Becoming Uninsured Every Day



Misleading Pie Chart Comparison

