

# Math 160/263 Minitab Assignment # 2 - Windows Version

## Chapter 1 - Describing Distributions

Worksheet Name - data2.MTW

1. The average annual incomes in 1999 of workers in the fifty states and the District of Columbia are given in data2.MTW.
  - (a) Use the **Graph** menu command to make a stemplot of the data.
  - (b) Use the **Stat > Basic Statistics > Display Descriptive Statistics** menu command to find the mean and median of the distribution.
  - (c) What feature of the distribution explains the relationship between the mean and median?
  - (d) Which, if any, observations are suspected outliers?
  - (e) Approximately what average annual income would place a state in the top 25%?
  - (f) Approximately what average annual income would place a state in the bottom 25%?

Source:

*2001 Statistical Abstract of the United States*

2. The counts of major hurricanes for each year between 1944 and 2000 are also given in data2.MTW.
  - (a) Use the **Graph** menu command to make a histogram of the data.
  - (b) Briefly describe the shape of the distribution.
  - (c) Use the **Graph** menu command to make a time series plot of the data.
  - (d) Does there appear to be any long term trend in the number of major hurricanes per year during the period 1944 to 2000? Explain.

Source:

Moore, David S. & George P. McCabe, *Introduction to the Practice of Statistics*, 4th ed., W.H. Freeman & Company, 2002, p. 35.