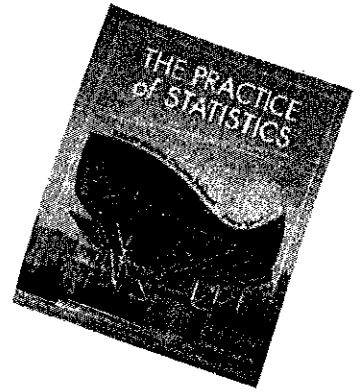


Welcome to A.P. Statistics. In order to guarantee that we have sufficient time to review for the A.P. Exam, we are getting a jump start on the first section of the text. This material covers the review topics that I suggest you look over before the course begins. You are expected to read and take notes on the section as well as complete the assigned textbook problems and worksheet.



Section

Homework

Intro to Stats

Complete the worksheet on mean, median, mode, boxplots and histograms. Read and take notes pp. xii-26 in The Practice of Statistics. Do exercises (1, 3, 5)

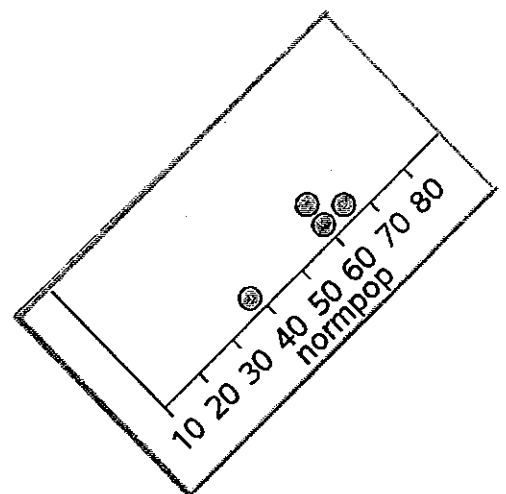
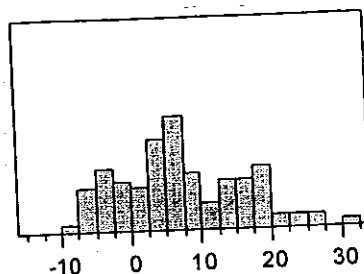
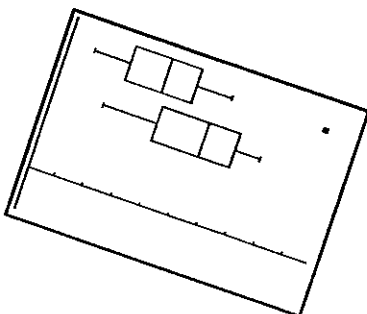
Section 1-1: Distribution, Center, Spread, Shape, Outliers, Bar and Pie Charts, Dot Plots, Stem & Leaf Plots

You are also expected to type a one-page summary of the summer reading book, Outliers, by Malcolm Gladwell. In the summary, include at least one paragraph on the vignette that you liked the most in addition to the general overview of the book. This summary is due the Tuesday of the second week of class.

You should also check out the postings on my webpage at westernhigh.org. I will have several hotlinks for A.P. Statistics including the Student Information Sheet and the A.P. Statistics Chapter 1 Syllabus. On the first day of class, we will discuss in more detail what will be posted on this page.

Again, I want to welcome you to A. P. Statistics, a math course that has applications in many disciplines and to the real world.

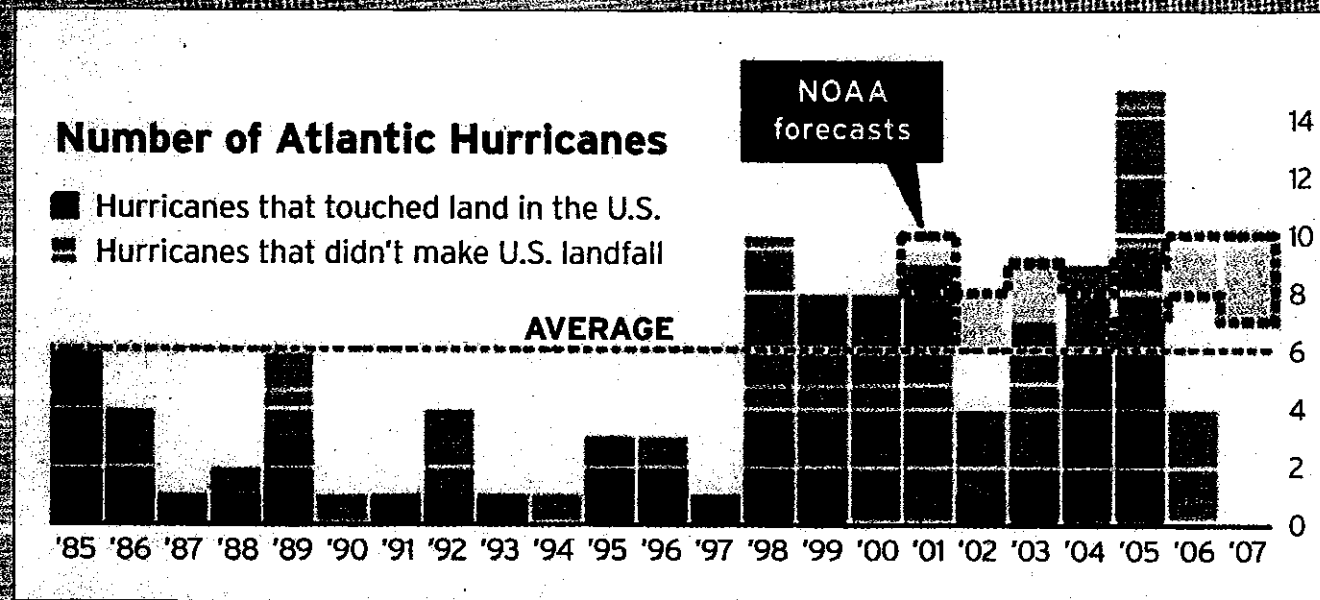
Mrs. Linda Morrell
A.P. Statistics



AP STATISTICS SUMMER ASSIGNMENT

review: mean, median, mode, boxplots, histograms

Storm Prediction: 2007 May Be a Busy Year



Source: Rinker Buck, "Awaiting the 'Big One,'" *Hartford Courant*, May 23, 2007, p. A1

Consider the annual number of Atlantic hurricanes during the period 1985–2006.

1. Make a frequency table.
2. (a) Compute the mean, median, and mode.
(b) Do any of these figures match the average indicated by the horizontal line in the chart?
3. (a) Find the values of the first quartile, second quartile (median), and third quartile as well as the minimum and maximum values.
(b) Do any values appear to be outliers?
(c) A common statistical definition of *outlier* is any number that falls below the first quartile or lies above the third quartile by more than 1.5

times the distance between the first and third quartiles. According to this definition, are there any outliers in this data set in the chart?

- (d) Construct a box-and-whisker plot.
4. (a) In 2007 there were 6 hurricanes. Compare this to the NOAA (National Oceanic and Atmospheric Administration) forecast shown in the chart.
(b) Go to NOAA's National Hurricane Center Web site (www.nhc.noaa.gov) to find the forecast for the 2008 season.
(c) The hurricane season ends on November 30 of each year. At the end of the 2008 hurricane season, compare the forecast with the actual number of hurricanes.