

R-assignment 2

Math 361

The table given in the excel-file called table-2 shows the math mean scale score for high schools in Arizona for 2011. These data are also found in an excel-file called data-2. Use R for the following problems. (Read page 1-18 in "Using R for Introductory Statistics" by J. Verzani and look at the lecture notes).

- (a) Import the excel-file called data-2 into R by using the scan command (see page 104 in Verzani's book and the lecture notes.)
- (b) Construct a relative frequency histogram. Choose an appropriate number of intervals and specify the cut-points. Label the x-axis and give a title to the histogram.
- (c) Describe the shape of the histogram. (skewness, symmetry, peaks).
- (d) Construct a stem-and-leaf diagram starting with stems of 30.
- (e) Compute the sample mean and the sample standard deviation.
- (f) Find the five-number summary of the data.
- (g) Construct a horizontal box-and-whisker display.
- (h) Are there outliers? Show your calculation.
- (i) Which graphical representation best displays the data, the histogram or the box-and-whisker display? Explain your answer.