

Worksheet – Sections 3.4-3.5

1) A group of nine children have the following heights:

54.0, 62.0, 53.0, 48.0, 53.5, 60.0, 71.0, 48.0, 50.8

Find the median and interquartile range for the distribution of the children's heights.

2) An instructor recorded the study time (in minutes) that 30 students spent studying for a quiz:

12, 18, 22, 25, 27, 31, 34, 36, 38, 41,

43, 45, 47, 49, 52, 54, 56, 58, 61, 63,

66, 68, 71, 74, 76, 79, 82, 85, 88, 93

(a) Use StatCrunch to draw the histogram using bin width 10.

(b) Describe the shape of this distribution (symmetry, mounds, outliers).

(c) Find the mean, median, mode, interquartile range, standard deviation.

(d) What is a suitable measure for center?

3) Consider the following data set:

8, 10, 11, 12, 13, 14, 15, 16, 17, 18,

18, 19, 20, 21, 22, 23, 24, 25, 27, 29,

31, 34, 38, 42, 47, 53, 61, 72, 86, 105

(a) Use StatCrunch to draw the histogram using bin width 10.

(b) Describe the shape of this distribution.

(c) What is a suitable measure for center?

(d) Draw a boxplot using StatCrunch.

(e) Determine the outliers.

4) Make (by hand) a boxplot of the data set in Problem 1.