

Box and Whisker Plot

I. List numbers in order from least to greatest.

II. Identify the following five numbers:

- a. **smallest number** in set of data (lower extreme)
- b. **first quartile**- median of the lower half of numbers. (lower quartile)
- c. **median** of the entire set of data. (second quartile)
- d. **third quartile**-median of the upper half of number. (upper quartile)
- e. **largest number** in set of data. (upper extreme)

II. Plot the five numbers on a number Line.

- Draw a box extending from the first quartile to the third quartile.
- Draw a line through the median (second quartile)
- Draw lines (whiskers) extending from each end of the box to the smallest number and the largest number . (extremes)

III. **Inter-quartile range**- The difference between the 3rd quartile and the 1st quartile. (the length of the box)

Example I.

4,29,32,17,13,3,10,36,31,26,8,21

Example II.

36,19,24,40,16,32,45,28,37,31,30,43,17