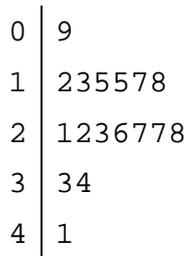


Math 2400 Classwork
Boxplot Exercises

Name _____

Below is the correct stem-leaf plot representing the data set of the fat content in grams of several popular fast food entrees (shown again here for reference). Round all values to the nearest tenth.

41	28	33	22	12	13	17	15	27
27	18	34	21	23	9	15	26	



Add all 17 numbers and divide by 17. This value is the *mean*. The mean is _____.

Your completed stem-leaf plots should have all the numbers listed in order.

Find the middle number. This value is the *median*. The median is _____.

Since the data set contains 17 values, the middle number is straightforward to find. How would you determine the median if there were an even number of values in the list?

You have now divided the list into two halves: the *lower half* contains the values smaller than (*below*) the median; the *upper half* contains the values larger than (*above*) the median.

Find the median of *the lower half*. This is called the *first quartile*. _____

Find the median of *the upper half*. This is called the *third quartile*. _____

What do you think is the *second quartile*? _____

Find the smallest number in the set. This is called the *minimum*. _____

Find the largest number in the set. This is called the *maximum*. _____

The minimum, median, quartiles, and maximum, make up the *five-number summary*.

A boxplot is a graph of the five-number summary. The region between the lower and upper quartile is enclosed in a box. The median is marked with a line inside the box. The region from the minimum to the first quartile is marked with a line (called a “whisker”). The region from the third quartile to the maximum is also marked with a whisker line. Using the graph scale below as a guide, sketch a boxplot of these data.

