



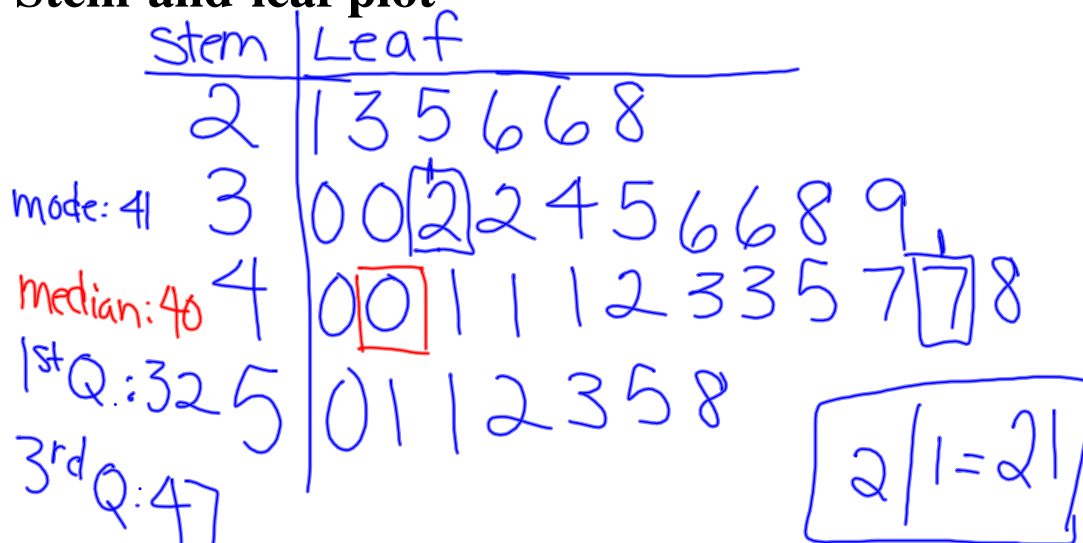
7th Grade Investigation 4

- I can create and interpret stem-and-leaf and box-and-whisker plots.
- I can find mode, range, & median of a set of data.

35

~~40, 30, 43, 48, 26, 50, 55, 40, 34, 42, 47, 47,~~
~~52, 25, 32, 38, 41, 36, 32, 21, 35, 43, 51, 58,~~
~~26, 30, 41, 45, 23, 36, 41, 51, 53, 39, 28~~

Stem-and-leaf plot



Mode: number that appears most often in a set of numbers

Range: the difference between the least and greatest numbers

Median: middle number of your data when arranged in order

First Quartile or Lower Quartile:

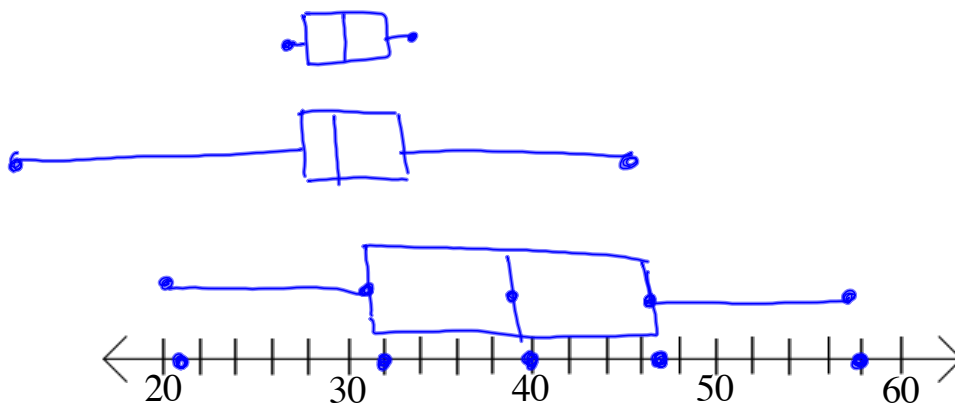
middle number of the lower half

Third Quartile or Upper Quartile:

middle number of the upper half

Box-and-whisker plot

Shows: extremes (lowest & highest), lower quartile, median, upper quartile



Do the rest of the packet for Monday (11/19/12)

Create a stem-and-leaf plot for the following set of scores. Then draw vertical segments on the plot to indicate the median and the first and third quartiles.

15, 26, 26, 27, 28, 29, 29, 30, 32, 33, 35, 36, 38,
38, 38, 38, 40, 41, 42, 43, 45, 45, 46, 47, 47, 48,
50, 52, 54, 55, 57, 58

What is the lower quartile, median, and upper quartile of this set of scores?

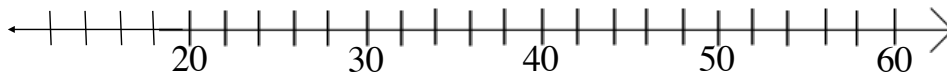
What is the mode of this set of scores?

What are the upper and lower extremes of these scores?

What is the range of the scores?

The **interquartile range** is the difference between the upper and lower quartiles. What is the interquartile range of these scores?

Create a box-and-whisker plot for this set of scores by using the calculations you have made for the median and the quartiles.



An **outlier** is a number in a set of numbers that is distant from the other numbers in the set. In this set of scores there is an outlier. Which score is the outlier?