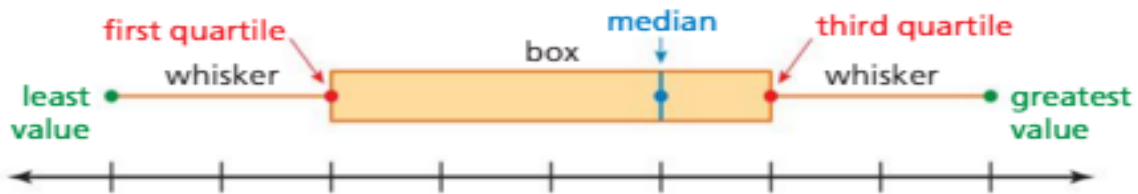


10.4 (pg.460) *Box-and-Whisker*

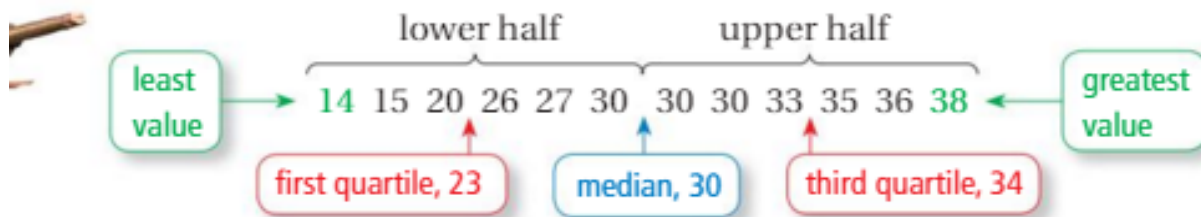
A box-and-whisker plot represents a data set along a number line by using the least value, the greatest value, and the quartiles of the data. A box-and-whisker plot shows the variability of a data set.



The five numbers that make up the box-and-whisker plot are called the five-number summary of the data set.

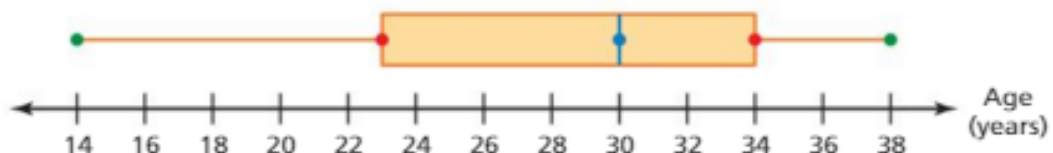
15, 20, 14, 38, 30, 36, 30, 30, 27, 26, 33, 35

Step 1: Order the data. Find the median and the quartiles.



Step 2: Draw a number line that includes the least and greatest values. Graph points above the number line that represent the five-number summary.

Step 3: Draw a box using the quartiles. Draw a line through the median. Draw whiskers from the box to the least and the greatest values.



Shapes of Box-and-Whisker Plots



Skewed left

- Left whisker longer than right whisker
- Most data on the right



Symmetric

- Whiskers about same length
- Median in the middle of the box



Skewed right

- Right whisker longer than left whisker
- Most data on the left