Median

The median is the middle value of the observations when they are ordered from the smallest to the largest.

If the number of observations is odd we have one median:

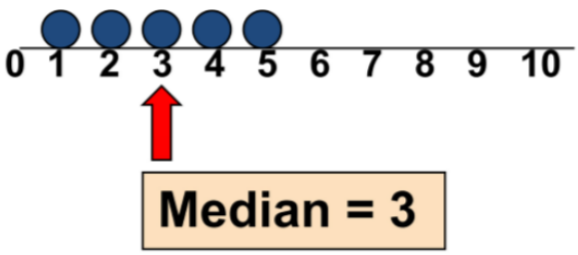
$$\frac{n}{2}$$

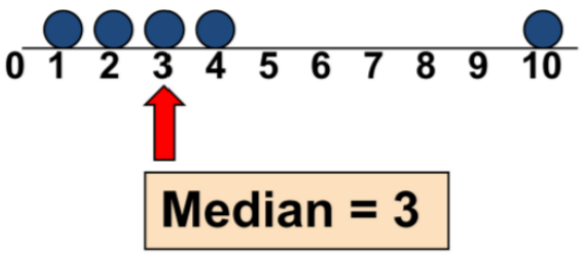
If the numbe of observations is even, the medians are:

$$(\frac{n}{2}, \frac{n+1}{2})$$

Steps to find median:

1. Order the observations;
2. Check the even/odd number thing;
3. Get the median.

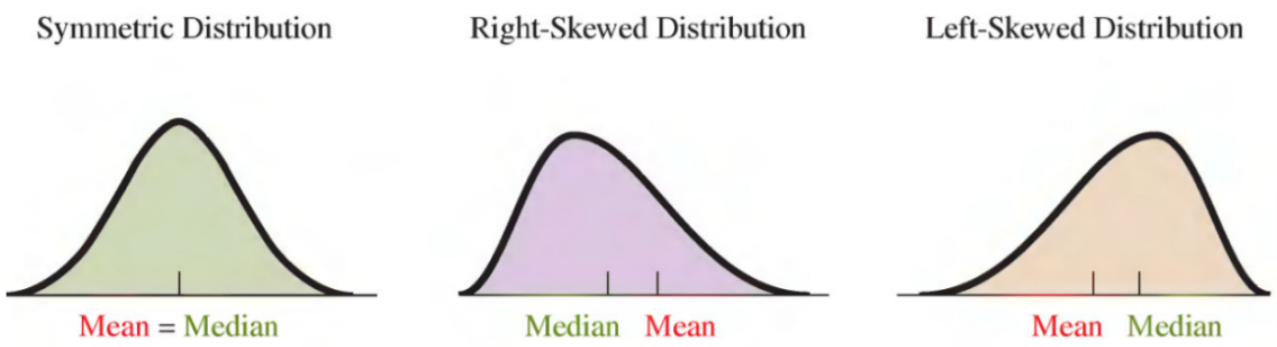




Info

The median is more robust to extreme values than the mean, because the median doesn't take into considerations all the values.

Skewed Distributions



- **Median == Mean**: Symmetrical
- **Median < Mean**: Skewed to the right
- **Median > Mean**: Skewed to the left