

1A: I CAN organize data in one variable with different representations, then interpret and compare differences in shape, center, and spread of the data sets, including accounting for outliers.

Mean: The average of a set a numbers

Median: The middle value of a set of data (The data must be in order from least to greatest)

Mode: The value of a set of data seen the most

Range: Greatest value - least value in a set of data

EX: Number of goals scored:

2	1	2	3	2	4	4	5	1	2
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$$\text{Mean} = \frac{2 + 1 + 2 + 3 + 2 + 4 + 4 + 5 + 1 + 2}{10} = \frac{26}{10} = 2.6$$

Median = 1 1 2 2 2 2 3 4 4 5 = 2 (The middle of 2 and 2 is 2!)

Mode = 2 (we see it 4 times)

Range = 5 - 1 = 4

Outlier: A number that is much greater or less than the rest of the data

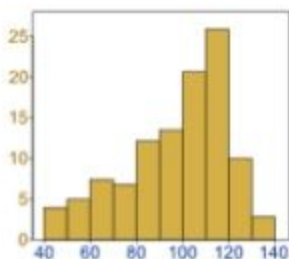
EX: Number of goals scored:

2	1	2	3	2	4	15	5	1	2
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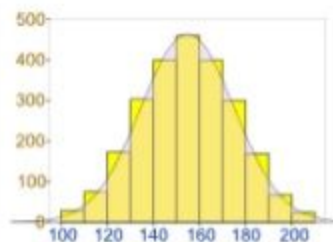
15 is the outlier!

Data can be skewed if it is centered around the left or the right. We name the skew based on the 'tail'.

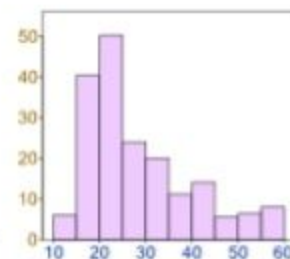
EX:



Skewed Left



Normal Distribution



Skewed Right