Label The Parts of the Box Plot

Minimum - lowest value in a set of data

Lower Quartile – the median of the lower 50% of the data

Median – the data point that is in the middle of the data (data must be in numerical order)

Upper Quartile – the median of the upper 50% of the data

Maximum – the largest value in a set of data

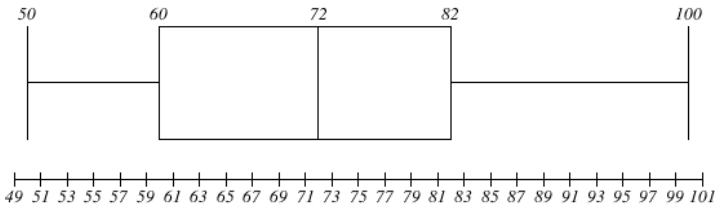
Range – the minimum value subtracted from the maximum value

Inner Quartile Range – the Lower Quartile subtracted from the Upper quartile

Outliers – data points that are determined to be out of place and do not belong in a set of data.

Given Three situations and their box plot, analyze the situation.

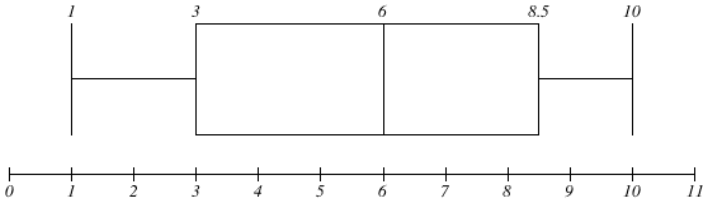
1. A test was graded and the results were shown to the class of 32 in the form of a box plot. What can you conclude about the test scores? How many students scored above an 82? Below a 60?



Large range, but very symmetrical data, no outliers

8 students scored above an 82% and 8 students scored below a 60%

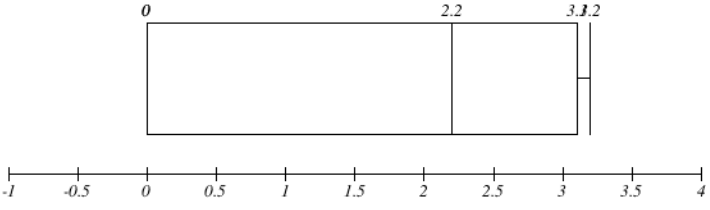
2. 30 Students were asked to rank the season of Spring. 1 is an unfavorable ranking, 10 is a favorable ranking. The results are shown below. How many students ranked spring between a 3 and a 6? What can you conclude about the survey overall?



7 or 8 students ranked spring between a 3 and 6

Data is mostly symmetrical, slightly skewed to the right. No outliers.

3. The local school board would like to raise taxes to fund new schools. A survey of County taxpayers was conducted asking the percentage they would be willing to pay to support new schools. How many taxpayers said they would not support a tax increase? What can you conclude about the survey in general?



25% of the taxpayers would not support a tax increase.

Data is not symmetrical.

People either love the idea or hate it.