Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**One Variable Statistics**

**Box Plots – Part 2**

**Independent Practice**

1. The number of boots that 25 students had in their homes in Florida were recorded below:

$$0, 0, 0, 0, 0, 0, 0, 1, 1, 1, 1, 2, 2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 4, 5, 6$$

Create a box plot of the data above. Label the minimum, maximum, first quartile, third quartiles and median



1. One of the students was removed from the survey and replaced with a different student’s data.

$$0, 0, 0, 0, 0, 0, 0, 1, 1, 1, 1, 2, 2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 4, 5, 9$$

Create a box plot of the data above. Label the minimum, maximum, first quartile, third quartiles and median



1. Compare the five-number summaries in Questions 1 and 2. Which of the five-number summaries changed?
2. When the maximum value in a data set is exchanged for a higher number, does it change any of the other numbers in the five-number summary?
3. The boxplot below represents the number of texts sent in two minutes by $11$ different freshmen.



1. The $75th$ percentile of the data set is \_\_\_\_\_\_\_\_\_.
2. The middle half of the data values are between \_\_\_\_\_\_\_ and \_\_\_\_\_\_\_.
3. $25\%$ of the students sent \_\_\_\_\_\_\_ or fewer texts in two minutes.