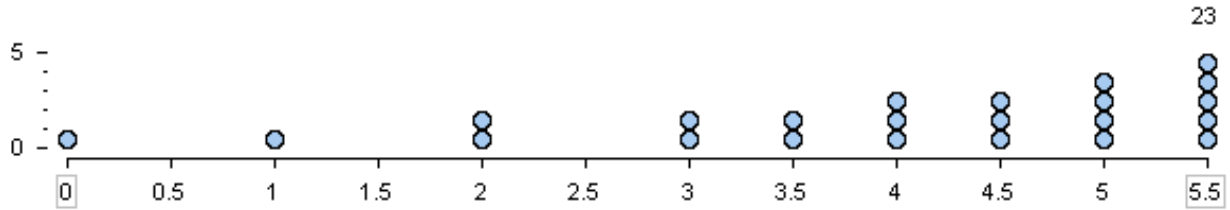1. Draw a boxplot for the distribution shown in the dotplot.

2. A boxplot is a graphical summary of the data set. I cannot tell by looking at the boxplot how many data points are in the data set or how the data is distributed within each quartile. To illustrate this important idea, make up a two different sets of data to match this boxplot. Put 10 numbers in one of the data sets and 13 numbers in the other data set.
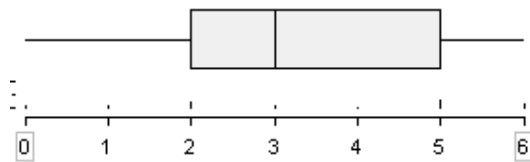
3. The 1999 Consumer Reports new Car Buying Guide reported the number of seconds required for a variety of cars to accelerate form 0 to 30 mph. The cars were also classified into six categories by type. The following boxplots display the distributions of acceleration times for each type of car. (Note: the astericks on the boxplot for the small type of cars, these denote outliers.)
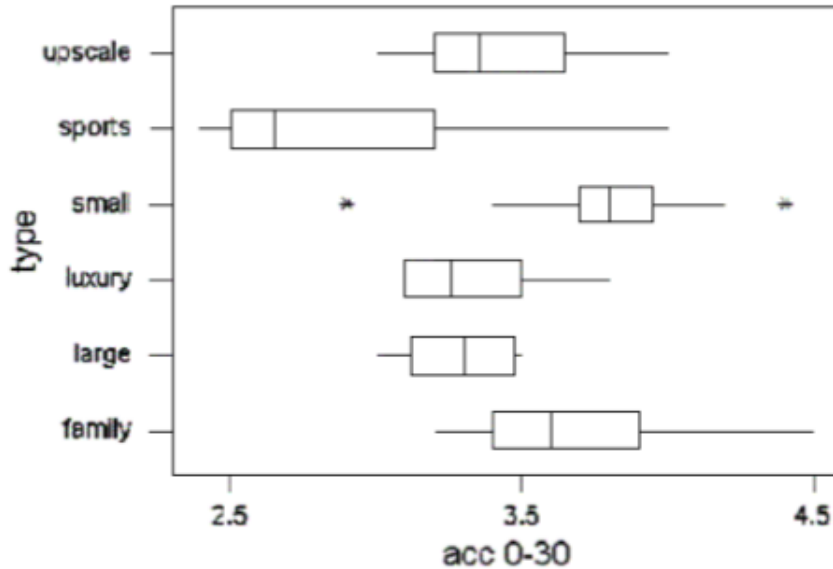
a. If we compare a *typical* car in each category, which type accelerates the fastest? What part of the boxplots did you compare to make your choice?

b. If we compare the *typical* range of acceleration times for each car type, which type performs the most consistently? What part of the boxplots did you compare to make your choice?

c. If the outliers were removed from the dataset of Small cars, which of the following measures of spread would be least affected? *Overall range, interquartile range* (the distance between the 1st and 3rd quartile marks), *average distance from the mean (ADM)*