

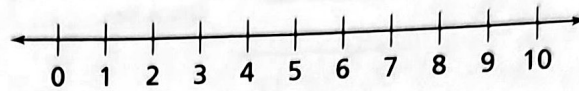
## KEY CONCEPT



You can use data displays, such as box plots, to make informal comparative inferences about two populations. You can compare the shapes of the data displays or the measures of center and variability.

The medians of the two data sets appear to be the same.

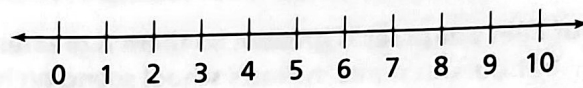
**Data Set A**



50% of the values in Data Set A are between 4 and 7.

The length of the box, the IQR, for Data Set B is greater than the length of the box, the IQR, for Data Set A. So Data Set B has greater variability.

**Data Set B**



50% of the values in Data Set B are between 4 and 9.

## Do You Understand?

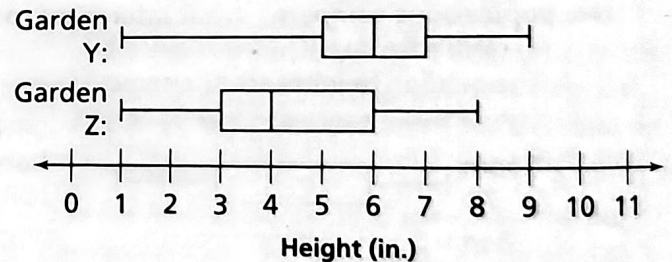
1. **Essential Question** How can data displays be used to compare populations?

2. **Generalize** What measures of variability are used when comparing box plots? What do these measures tell you?

3. **Make Sense and Persevere** Two data sets both have a median value of 12.5. Data Set A has an interquartile range of 4 and Data Set B has an interquartile range of 2. How do the box plots for the two data sets compare?

## Do You Know How?

The box plots describe the heights of flowers selected randomly from two gardens. Use the box plots to answer 4 and 5.



4. Find the median of each sample.

Garden Y median =  inches

Garden Z median =  inches

5. Make a comparative inference about the flowers in the two gardens.