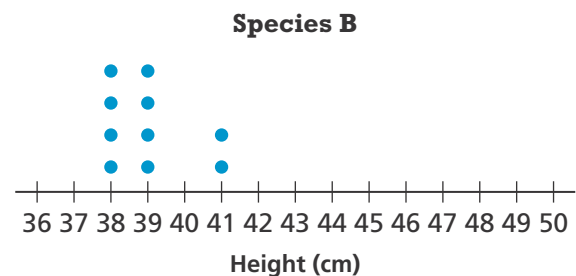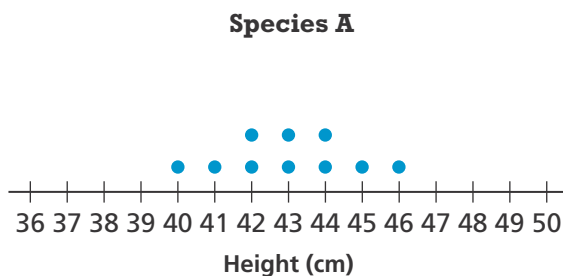Name: _____

6-4 Additional Practice

1. To analyze two schools in the district, the school board randomly surveys 10 students from each school to find how many hours were spent doing homework last night. The data is recorded in the table below.

Number of Hours Spent on Homework										
Xavier Middle School	0	2	2	1	1	4	3	3	4	3
Yates Middle School	1	4	6	3	3	0	2	2	6	3

a. Which measure of center should the education board use to describe the data? Explain.

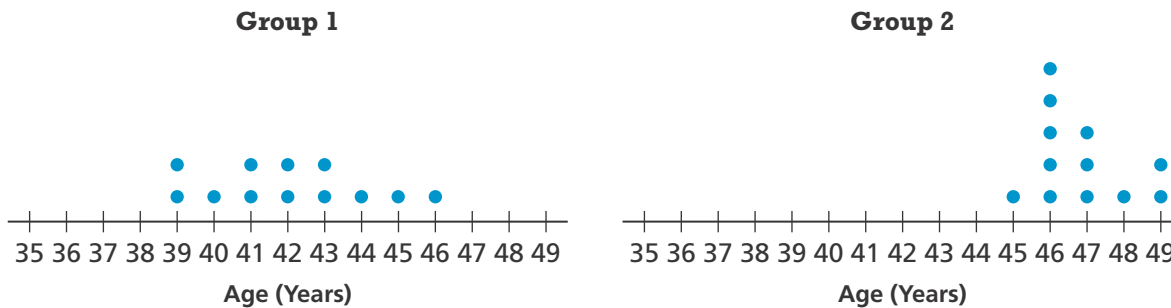**b.** What can you infer using the measure of center?

2. The heights of 10 mature plants from each of two different species are recorded in the dot plots below. These samples are representative of each species.

Species A

36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
Height (cm)

Species B

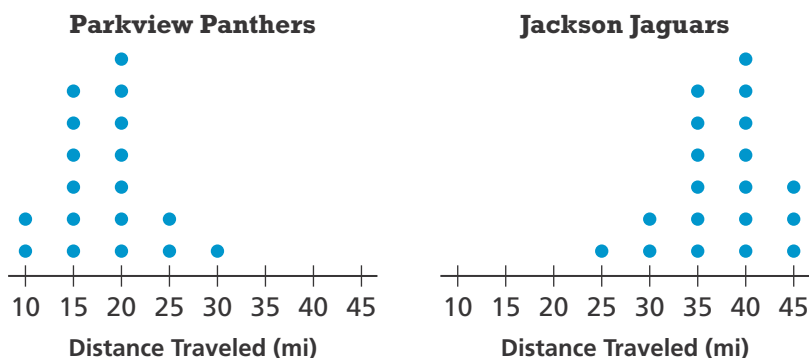36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
Height (cm)

a. Find the mean height of each species.

b. Make an inference about the species based on the mean values.

3. The following dot plots describe the ages of members of two groups of tourists. Suppose the groups of tourists are combined and one tourist, whose age is 46, is randomly selected. Is it *most likely* that this tourist is a member of Group 1 or Group 2? Explain.

Group 1

Age (Years)

Group 2

Age (Years)

4. Higher Order Thinking The dot plots below show the approximate distances players on two soccer teams had to travel to get to the soccer field for their game. Which measure of center should be used to make a comparative inference about the distance traveled by players from each team? Use this measure of center to form a comparative inference.

Parkview Panthers

Distance Traveled (mi)

Jackson Jaguars

Distance Traveled (mi)

Ⓒ Assessment Practice

5. Juanita recorded samples of the lengths of the shadows cast by elm trees in two of her neighbors' yards at the same time of day. The median of the sample from Neighbor X's yard is 20 feet. The median of the sample from Neighbor Y's yard is 50 feet. Which is a comparative inference that Juanita can make from the median values?

Ⓐ There are more elm trees in Neighbor Y's yard than in Neighbor X's yard.

Ⓑ Most of the elm trees in Neighbor X's yard are older than the elm trees in Neighbor Y's yard.

Ⓒ There are more elm trees in Neighbor X's yard than in Neighbor Y's yard.

Ⓓ Most of the elm trees in Neighbor Y's yard are older than the elm trees in Neighbor X's yard.