Practice 6.1.2: Comparing Different Data Sets

A

Use the given information to complete problems 1–4.

There are two farmer's markets near Kira's house. She decides to visit both every weekend over the summer and survey the number of different types of fruits and vegetables for sale. Kira's data is listed in the following tables.

Market A

Visit number	Types of produce for sale
1	5
2	12
3	23
4	30
5	30
6	23
7	30
8	24
9	19
10	11
11	10
12	7

Market B

Visit number	Types of produce for sale
1	12
2	11
3	16
4	29
5	25
6	29
7	30
8	33
9	26
10	22
11	20
12	15

1. Determine which measure of center to use to compare the data.

2. Calculate the measure of center for both data sets.

3. Calculate the mean absolute deviation of each data set.

4. Use the measures of center and spread to describe any similarities and differences between the data sets.

continued

Use the given information to complete problems 5–8.

Sasha surveyed the people in his study group to find how many hours per week everyone was spending playing video games. Judy also surveyed the people in her study group about how much time they were spending playing video games. Their results are listed in the following tables.

Sasha's data

Study buddy	Hours of video games per week
1	12
2	6
3	42
4	6
5	3
6	5
7	16
8	15
9	21
10	14
11	12
12	15

Judy's data

Study buddy	Hours of video games per week
1	8
2	15
3	18
4	15
5	24
6	21
7	14
8	11
9	17

5. Determine the minimum, maximum, first quartile, median, and third quartile of each data set.

6. Create a box plot of each data set.

7. Compare the center and spread of the data from each study group.

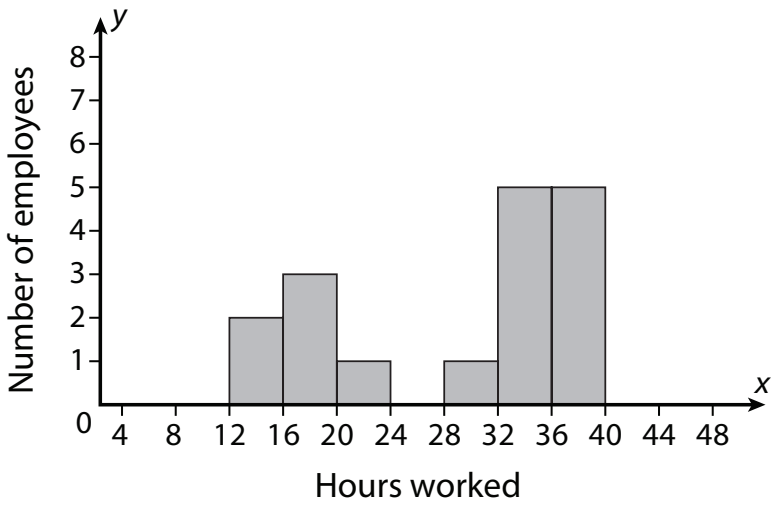
8. Why do you think the data is distributed differently in the two study groups?

continued

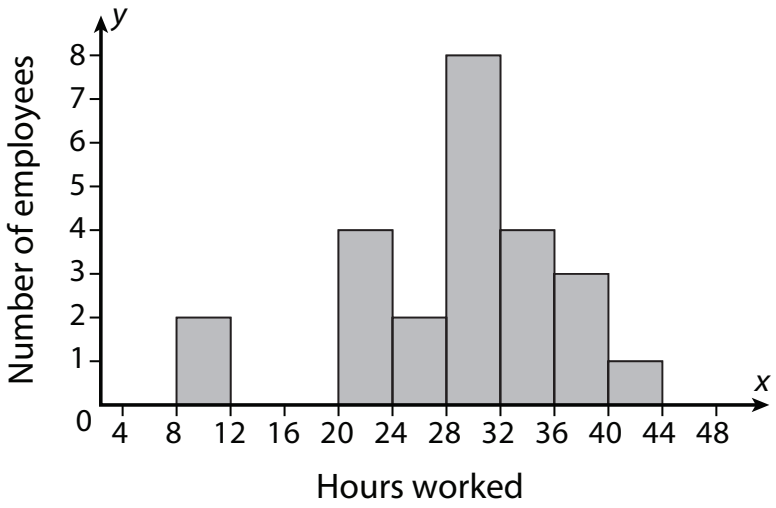
Use the given information to complete problems 9 and 10.

Lucille and Martin are managers at different clothing stores. Each one kept track of how many hours their employees worked in a single week. The data is plotted in the following histograms.

Store 1



Store 2



9. At which store do employees average more work hours? Explain.

10. Describe the difference in the variation of the number of hours worked at each store.