Practice 6.2: Comparing Data Sets B

Mr. Roy asks his students in his two science classes how old they were the first time they rode on a plane. The responses are in the following tables. Use the tables to solve problems 1–4.

Class 1	
Student	**Age in years**
1	10
2	9
3	2
4	10
5	11
6	3
7	9
8	9
9	11
10	8
11	9
12	12
13	8
14	15
15	15

Class 2	
Student	**Age in years**
1	4
2	9
3	1
4	13
5	3
6	11
7	13
8	12
9	14
10	2
11	6
12	7
13	10
14	14
15	11

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 for both data sets.

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

continued

Chloe works at a clothing store. She earns commission each time she makes a sale. She records how much she earns on a Tuesday and a Wednesday in the following tables. Use the tables to solve problems 5–8.

Tuesday's commissions in dollars
19.50
12.40
15.60
12.70
17.10
10.60
21.40
14.40
17.00
5.00

Wednesday's commissions in dollars
24.10
33.70
27.70
29.90
33.40
6.00
8.60
10.50
5.60
22.90

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

6. Create a box plot of each data set.

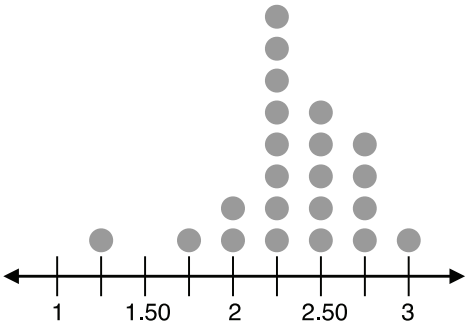
7. Compare the center and spread of the data from each day.

8. Next week, Chloe has the option of working on either Tuesday or Wednesday. Which day should she work?

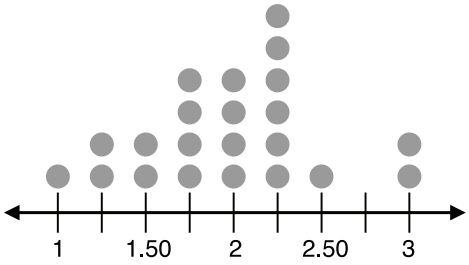
continued

Schools in Florida and South Carolina were surveyed about the current price of a school lunch. The responses to the surveys are in the following dot plots. Use the dot plots to complete problems 9 and 10.

Florida school lunch prices (in dollars)



South Carolina school lunch prices (in dollars)



9. Which state appears to have the higher mean cost for school lunch? Explain.

10. Which state appears to have the higher variation in school lunch cost? Explain.