Lesson 5 Homework Practice

Measures of Variation

For Exercises 1 and 2, find the mean absolute deviation of each set of data. Round to the nearest tenth if necessary. Describe what the mean absolute deviation represents.

1.

Exercise Time (min)			
45	60	75	90
100	75	90	105

16.3; Sample answer: The average distance each data value is from the mean is 16.3 minutes.

2.

Food Items Donated		
38	46	52
44	47	55

4.3; Sample answer: The average distance each data value is from the mean is 4.3 food items.

3. Refer to the table in Exercise 1. The standard deviation is about 20.4 minutes. Describe the data values that are within one standard deviation of the mean.

Exercise times between 59.6 and 100.4 minutes are within one standard deviation of the mean.

4. The table shows the selling prices of various laptops at two electronic stores.

   a. Find the mean absolute deviation for each set of data. Round to the nearest hundredth.

   Crazy for Computers: $358.30; Keyboard Kings: $191.70

Tablet Prices ($)	
Crazy for Computers	Keyboard Kings
150	500
200	550
500	650
800	850
1,000	900
1,200	1,100

   b. Write a sentence comparing their variation.

   Sample answer: The prices of tablets at Crazy for Computers have a greater variation that the prices of tablets at Keyboard Kings.