

Name:

Date:

Hour:

Algebra 1
WS PC #1 Unit 5 Review

Find the mean, median, and mode of each data set. Which measure of center best represents the data?

1. Mean:

Median:

Mode:

Hours Spent on Project		
3.5	5	2.5
3	3.5	0.5

2. Mean:

Median:

Mode:

Waterfall Height (ft.)		
1000	1267	1328
1200	1180	1000
2568	1191	1100

Find the range and standard deviation of each data set. Then compare your results.

3. Absent students during a week of school

Female: 6, 2, 4, 3, 4

Male: 5, 3, 6, 6, 9

4. Number of points scored

Juniors: 19, 15, 20, 10, 14, 21, 18, 15

Seniors: 22, 19, 29, 32, 15, 26, 30, 19

5. A student scores 74, 68, 83, 85, 77 on their first 5 tests of the semester. What does the student have to score on the 6th test to have an average of an 80%?

Find the 5-number summary of each data set. Make a box-n-whisker plot that represents the data.

6. Ages of family members: 60, 15, 25, 20, 55, 70, 40, 30

7. Minutes of violin practice: 20, 50, 60, 40, 40, 30, 60, 40, 50, 20, 20, 35

8. Using your box-n-whisker plot from #6 answer the following questions.

a. Find and interpret the range of the data.

b. Describe the distribution of the data.

c. Find and interpret the interquartile range of the data.

d. Are the data more spread out below Q1 or above Q3? Explain.

e. Find the values of the measures when each data set is increased by 7.

f. Find the values of the measures when each data set is decreased by 10%.

9. Display the data in a histogram. Describe the shape of the data.

Quiz Score	0-2	3-5	6-8	9-11	12-14
Frequency	1	3	6	16	4

10. The table shows the prices of 8 mountain bikes in a sporting good store.

Price (\$)	98	119	211	130	98	100	95	125
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- a. Find the mean, median, mode, range, and standard deviation of the prices.

- b. Identify the outlier. How does the outlier affect the mean, median, and mode?

- c. Make a box-n-whisker plot that represents the data. Find and interpret the interquartile range of the data.

- d. Identify the shape of the data.

- e. Find the mean, median, mode, range, and standard deviation of the prices when the store offers a 5% discount on all mountain bikes.

11. The table shows the times of 20 presentations.

Time (minutes)			
9	7	10	12
10	11	8	10
10	17	11	5
9	10	4	12
6	14	8	10

- a. Display the data in a histogram using 5 intervals beginning with 3-5.

 - b. Which measures of center and variation best represent the data? Explain.

 - c. The presentations are supposed to be 10 minutes long. How would you interpret the results?
12. The ages of male and female volunteers at a hospital are listed below.
- Male: 14, 17, 20, 16, 17, 14, 21, 18, 22
- Female: 13, 22, 17, 30, 25, 14, 14, 18, 19, 29
- a. Make a parallel box-n-whisker plot to represent the data.

 - b. Identify the shape of each distribution.

 - c. Which age is more spread out? Explain.