

Unit 9: Data Collection and Analysis
Review Worksheet ~ Lessons 1-3

I. Mean, Median, Mode, and Range

Find the mean, median, mode, and range of each data set.

1.

Distance (mi)					
5	6	4	7	3	5

2.

Test Scores				
78	80	85	92	90

3.

Ages of Students (yr)							
11	13	12	12	12	13	9	14

4.

Number of Pages in Each Book						
145	119	156	158	125	128	135

II. Additional Data and Outliers

5. The table shows the number of people who attended each monthly meeting from January to May.

Number of People Attending				
Jan	Feb	Mar	Apr	May
27	26	32	30	30

- a. Find the mean, median, mode, and range of the attendance.
- b. In June, 39 people attended the meeting. In July, 26 people attended the meeting. Add this data to the table and find the mean, median, mode, and range with the new data.
- c. How did the mean, median, mode, and range change with the addition of the new data?

6. The four states with the longest coastlines are Alaska, Florida, California, and Hawaii. Alaska's coastline is 6,640 miles. Florida's coastline is 1,350 miles. California's coastline is 840 miles. Hawaii's coastline is 750 miles. Find the mean, median, mode, and range of the lengths with and without Alaska's coastline. What are the changes in the data? Why did these changes occur?

7. The daily snowfall amounts for the first ten days of December are listed below.

2 in., 5 in., 0 in., 0 in., 15 in., 1 in., 0 in., 3 in., 1 in., 4 in.

What are the mean, median, mode, and range of this data set? Which one best describes the data set?

III. Measures of Variation

8. The number of minutes it takes Will to complete each of 5 crossword puzzles is 18, 22, 21, 27, 19.

What is the mean absolute deviation for the time needed to complete the puzzles, to the nearest tenth?

9. The ages (in weeks) in which 6 infants learned to crawl are 23, 37, 33, 39, 29, and 31. What is the mean absolute deviation for the age at which the infants learned to crawl, to the nearest tenth?

10. A new song was rated by eight students on a scale from 1 to 10 (1 being the lowest rating and 10 the highest). The song was rated: 2, 8, 9, 3, 10, 9, 2, 3. Use the data to make a box-and-whisker plot.

11. A solution used to kill bacteria is tested. The solution kills the following percentages of bacteria in six trials: 85, 84, 87, 86, 90, 80. Use this data to make a box-and-whisker plot.

12. Find the interquartile range for each data set. Round your answers to the nearest tenth, if necessary.

a. 5, 2, 4, 7, 4, 4, 1

b. 14, 3, 9, 13, 5, 12