Name_____ Date _____

Chapter 9

Performance Task (continued)

Which Measure of Center is Best: Mean, Median, or Mode?

Is the mean of a data set always the best measure of center?

You are writing a report about the amount of daylight for the 15 cities in the United States with the greatest populations. You want to analyze and compare the data for the greatest and least amounts of daylight.

In Exercises 1–8, use the table below.

City	Greatest Amount of Daylight (minutes)	Least Amount of Daylight (minutes)
New York, New York	906	555
Los Angeles, California	866	593
Chicago, Illinois	913	548
Houston, Texas	843	614
Philadelphia, Pennsylvania	901	560
Phoenix, Arizona	863	596
San Antonio, Texas	842	616
San Diego, California	859	600
Dallas, Texas	859	599
San Jose, California	884	576
Jacksonville, Florida	846	611
Indianapolis, Indiana	900	561
Austin, Texas	846	612
San Francisco, California	887	573
Columbus, Ohio	901	560

1. What is the mean of the greatest amounts of daylight for the 15 cities? Round your answer to the nearest minute.

2. What is the mean of the least amounts of daylight for the 15 cities? Round your answer to the nearest minute.

Name _____ Date _____

Chapter 9

Performance Task (continued)

Which Measure of Center is Best: Mean, Median, or Mode?

3. What is the difference in the means you found in Exercise 1 and Exercise 2? Explain what this difference represents in the real world.

4. What is the median of the greatest amounts of daylight for the 15 cities?

5. What is the median of the least amounts of daylight for the 15 cities?

6. What is the difference in the medians you found in Exercise 4 and Exercise 5? Explain what this difference represents in the real world.

7. What is the mode of the greatest amounts of daylight for the 15 cities? What is the mode of the least amounts of daylight for the 15 cities?

8. In your report, you want to use the best measure of center to represent the data. Which measure of center would you use: mean, median, or mode? Explain your reasoning.