

1. The following are two lists of test scores for two different classes. Without any calculations, predict which class did better.

Class A: 10, 25, 51, 56, 58, 70, 77, 82, 92, 94, 95

Class B: 30, 32, 40, 77, 79, 86, 55, 45, 84, 78, 82

2. For class A and B above, find the class average (mean), median, mode, and range to determine which class did better.

3. Make a box plot to show a comparison of the two test scores.

4. Display the data in TWO different types of graphs to help support your decision.

Part II: Investigating Mean, Median, and Mode

5. Using mean only, which class had the highest average?

Class C: 0, 70, 72, 77, 80, 84

Class D: 30, 40, 50, 90, 94, 96

6. If you were the teacher of the classes above, which class would you prefer to teach?

7. Is mean always a good analysis for comparing data? Why or why not?

8. Find the mean and median of the following data. What do you notice?

Class E: 50, 50, 50, 50, 50, 50

Class F: 0, 0, 0, 100, 100, 100

9. If two students were absent from class G, what scores could they get if they increased the mean, but didn't change the median?

Class G: 30, 40, 40, 50, 66, 68, 90, 94, 98

10. What two scores could they get that would increase the median, but not significantly change the mean?

11. Challenge: Make a list of 10 numbers with the following statistical measurements.

a. Mean = 45, Median = 40, Mode = 60

b. Mean = 60, Median = 55, Mode = 65

c. Mean = 80, Median = 80, Mode = 80 (all numbers cannot be 80)