Determine the five number summary for each of Ms. Jones’ classes and plot them in a box plot on the number line below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Class 1** |  | **Class 2** |  | **Class 3** |
| 81  83  95  88  97  36  67  57  63  95  76  89  78  84  93 |  | 90  88  85  93  90  65  91  90  75  83  85  90  98  63  98 |  | 99  100  69  63  88  74  94  97  91  41  87  73  85  82  76 |
| Min: \_\_\_\_\_  Q1: \_\_\_\_\_\_  Median: \_\_\_\_\_\_  Q3: \_\_\_\_\_\_  Max: \_\_\_\_\_\_ |  | Min: \_\_\_\_\_\_  Q1: \_\_\_\_\_\_  Median: \_\_\_\_\_\_  Q3: \_\_\_\_\_\_  Max: \_\_\_\_\_\_ |  | Min: \_\_\_\_\_\_  Q1: \_\_\_\_\_\_  Median: \_\_\_\_\_\_  Q3: \_\_\_\_\_\_  Max: \_\_\_\_\_\_ |

1. Which measure of central tendency, mean or median, best describes the data from each class? Explain (show work).

Class 1:

Class 2:

Class 3:

2. Rank each class from least to greatest based on their interquartile range.

3. Compare the IQR for each class. Which class shows the least variation in test scores? Greatest?

4. Are there outliers for any class? Name them.

5. Given the data for each class, would you describe this as a good test? Explain.

6. Which class had 75% of students earn a score greater than 73%?

7. What percentage of students from class three earned 94-100?

8. Which class performed the best as a whole? Explain.