Name:
Date:
Period:

## Which Class is More Consistent?

Below are the semester grades for 2 different classes. Compute the Mean Absolute Deviation for each then answer the questions.

Round your mean to the nearest whole number. Round your MAD to the nearest tenth if needed.

Class A

| 88 | 87 | 79 | 76 | 90 |
| :--- | :--- | :--- | :--- | :--- |
| 87 | 91 | 80 | 92 | 85 |
| 94 | 83 | 74 | 83 | 77 |
| 71 | 82 | 81 |  |  |


| Score | Mean | Score - <br> Mean | IScore - <br> Meanl |
| :---: | :---: | :---: | :---: |
| 71 |  |  |  |
| 74 |  |  |  |
| 76 |  |  |  |
| 77 |  |  |  |
| 79 |  |  |  |
| 80 |  |  |  |
| 81 |  |  |  |
| 82 |  |  |  |
| 83 |  |  |  |
| 83 |  |  |  |
| 85 |  |  |  |
| 87 |  |  |  |
| 87 |  |  |  |
| 88 |  |  |  |
| 90 |  |  |  |
| 91 |  |  |  |
| 92 |  |  |  |
| 94 |  |  |  |
|  |  | SUM |  |
|  |  | MAD |  |

Class B

| 87 | 90 | 70 | 76 | 86 |
| :--- | :--- | :--- | :--- | :--- |
| 88 | 81 | 75 | 86 | 81 |
| 84 | 77 | 90 | 93 | 90 |
| 95 | 82 | 79 | 79 | 85 |
| 90 | 85 | 84 | 88 |  |


| Score | Mean | Score - <br> Mean | IScore - <br> Meanl |
| :---: | :--- | :--- | :--- |
| 70 |  |  |  |
| 75 |  |  |  |
| 76 |  |  |  |
| 77 |  |  |  |
| 79 |  |  |  |
| 79 |  |  |  |
| 81 |  |  |  |
| 81 |  |  |  |
| 82 |  |  |  |
| 84 |  |  |  |
| 84 |  |  |  |
| 85 |  |  |  |
| 85 |  |  |  |
| 86 |  |  |  |
| 86 |  |  |  |
| 87 |  |  |  |
| 88 |  |  |  |
| 88 |  |  |  |
| 90 |  |  |  |
| 90 |  |  |  |
| 90 |  |  |  |
| 90 |  |  |  |
| 93 |  |  |  |
|  |  |  |  |
| 95 |  |  |  |
|  |  |  |  |
| 701 |  |  |  |

Short Answer Questions.
Answer each question below. Be sure to explain each answer for full credit.

1. Which class had a higher mean score? By how much?
2. Which class had a higher range of test scores? By how much?
3. Which class had less variability? How do you know?

Use the box \& whisker plots for questions 4-7.

4. Which class was more likely to have someone score higher than $90 \%$ ? How do you know by looking at the graph?
5. What percent of students scored below an $80 \%$ in class B? Was that percentage higher or lower in Class A? How do you know by looking at the graph?
6. What is the range of each class? What is the interquartile range of each class?
7. Which class's scores were more predictable? How do you know?

