Critiquing Written Findings

Consider the following list dataset, representing the heaviest bench press (in lbs) for ten powerlifters:

1. In the space below, rewrite this dataset in sorted order.

55, 95, 110, 135, 135, 135, 185, 203, 230, 1075

2. In the table below, compute the measures of center for this dataset.

| Mean (Average) | Median | Mode |
|----------------|--------|------|
| 235.8 | 135 | 135 |
| 233.6 | 133 | 133 |

3. The following statements are *correct*... but misleading. Write down the reason why.

| Statement | Why it's misleading |
|--|---|
| "More personal records are set at 135 lbs than any other weight!" | 135 is the most common personal record for this dataset, however this statement is misleading because there are even more PRs at higher weights not taken into account by the Mode. |
| "The average powerlifter can bench press 235 lbs." | While the Mean for this dataset is ~235, there is a very high outlier pushing the average up, making this statement misleading. |
| "With a median of 135, that means that half the people in this group can't even lift 135 lbs!" | Looking at the full dataset, we can see that more than half of lifters can lift 135lbs or more, making this analysis of the Median misleading. |