Class Activity

Determine the Appropriate Measures. For each of the following data scenarios, decide which measure of center (mean or median) and which measure of spread (standard deviation or interquartile range) would be most appropriate. In each case, indicate if the **median** is greater or less than the **mean**, or if they will be roughly the same.

1. Salaries of employees in a tech company where a few high-level executives earn significantly more than the rest.

2. The height of plants grown in a controlled environment with consistent conditions.

3. Ages of participants in a marathon where both young and old individuals participate.

4. Prices of houses in a neighborhood where most houses are similarly priced but a few are extremely expensive.

5. Exam scores in a class where all students perform consistently with only a few outliers.

6. Time taken by different computers to run a specific program where all computers are of the same model and configuration.

7. The weight of apples picked from an orchard where some trees produce significantly smaller apples.

8. The number of books read by students in a class over summer vacation, where a few students read many books while others read none.

9. Monthly rainfall in a city that experiences consistent rainfall throughout the year.

10. The number of daily visitors to a website which often experiences sudden spikes in traffic.

For the following two graphs, identify whether it is a good data visualization or a misleading one. Also comment your observations on the graphs.