COMMUNITY OUTLIERSName \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Part IDetermine the mean score for each season and fill in the table.

|  |  |
| --- | --- |
| **COMMUNITY** |  |
| Episode | Text | Text | Text | Text | Text |
| 1 | 7.8 | 8.5 | 8.2 | 7.5 | 8.3 |
| 2 | 7.9 | 8.3 | 8.1 | 7.6 | 8.8 |
| 3 | 8.2 | 8.1 | 7.9 | 7.3 | 8.9 |
| 4 | 8.1 | 8.6 | 9.6 | 7.2 | 9.2 |
| 5 | 7.9 | 7.7 | 8.7 | 7.5 | 9.3 |
| 6 | 7.8 | 9 | 7.8 | 7.5 | 8.4 |
| 7 | 8.8 | 8.4 | 8.5 | 6.8 | 8.1 |
| 8 | 8 | 8.9 | 8.8 | 7.8 | 8.9 |
| 9 | 8.7 | 9.1 | 8.5 | 6.8 | 8.4 |
| 10 | 8.2 | 8.4 | 8.7 | 7.5 | 8.6 |
| 11 | 7.9 | 8.7 | 7.9 | 8.1 | 8.3 |
| 12 | 8.4 | 8.1 | 8.2 | 8 | 8.5 |
| 13 | 8.1 | 7.8 | 8.2 | 7.8 | 8.8 |
| 14 | 7.9 | 9.2 | 9 |  |  |
| 15 | 8.3 | 8.2 | 8.3 |  |  |
| 16 | 8.5 | 8.6 | 8.6 |  |  |
| 17 | 8.9 | 8.3 | 9.1 |  |  |
| 18 | 8.1 | 7.4 | 8.2 |  |  |
| 19 | 8.4 | 8.9 | 8.9 |  |  |
| 20 | 8.3 | 7.6 | 9.2 |  |  |
| 21 | 9 | 8.9 | 8.9 |  |  |
| 22 | 8.2 | 7.9 | 8.8 |  |  |
| 23 | 9.7 | 9.5 |  |  |  |
| 24 | 8.2 | 9.3 |  |  |  |
| 25 | 8.4 |  |  |  |  |
|  |  |  |  |  |  |
| Mean |  |  |  |  |  |

## Part II

1. Identify and explain any data you would consider an outlier.
2. Graph the mean score for each season, draw a line of best fit.
3. Graph the mean score without your outlier, draw a line of best fit.
4. What was the overall trend for all 5 seasons, both with and without the outlier? Explain the differences in the two trends.
5. As a researcher, what are some benefits or concerns if you were to exclude outliers? As a consumer of data, what are some benefits or concerns when you see data that may have the outliers excluded?

Part III
The scores from part II are based on ratings given by viewers about the quality of the episode. The graphs you created in part II describe the average score for each season as rated by viewers.

The graph below is based on the average number of viewers for each season.

1. How does the number of viewers relate to the quality ratings of the show?
2. If you were NBC which graph would be more important (number of viewers or quality of shows) to you in making decisions about the show and why?