

Name _____

Probability and Statistics Learning Target 2, 3 & 4 Data Analysis of World Series Games

_____/5 Introduction.

_____/4 1. Construct a frequency chart of the number of games in a World Series.

_____/6 2. Draw a histogram of the number of games in a World Series and describe the distribution of the data.

_____/6 3. Find the mean number of games in a World Series.

_____/6 4. Find the standard deviation of the number of games in a World Series.

_____/6 5. Is the mean and standard deviation a good way to describe the center and the spread of this data? Justify your answer. In your justification, explain the type of distributions that mean and standard deviation are associated with and therefore describe the best.

_____/6 6. What are the other descriptions of center? What are the other descriptions of spread? Calculate these also. Are these better descriptions for this set of data? Justify your answer.

_____/8 7. Make a probability model for this data by calculating the probability of playing 4 games, 5 games, 6 games, 7 games. What does the probability model tell you about this set of data?

_____/8 8. Suppose that each game aired on television earns about 2 million dollars of advertising revenue. What is the least amount of revenue that you will earn? What is the most amount of advertising revenue that you will earn? Based on these possible earnings and also on the analysis of the data, prepare a bid that you are willing to pay to the baseball league for the exclusive rights to televise the World Series. Justify your bid.

_____/5 Conclusion.