**Single Quantitative Variable**

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**The histogram of race results has 16 bins. How would it change if we had 5 bins? What about 100 bins?**

**How would you describe the shape of the histogram? (Left-Skewed/ Right-Skewed/ Approximately Symmetric) (unimodal / multimodal)**

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**Calculate the deviation of a result time of 16000 seconds.**

**Use software to compute the variance of this sample of results.**

**Using your answer to the previous question, calculate the standard deviation.**

**Find the IQR (Interquartile range).**

**Using your answer to the previous question, determine the values of the upper and lower fence.**

**Is a time of 21000 seconds an outlier? What about a time of 7500 seconds?**

**Do you think the mean or median is higher for the distribution? Explain your reasoning.**

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**Using the histogram, boxplot, and summary statistics you calculated, determine whether the mean or median is a more representative statistic to describe the center?**

**Is IQR or standard deviation a better assessment of spread in this instance?**