Data Management and Probability

Activity 5 Assessment

Exploring the Effect of Outliers on Mean, Median, and Mode

Exploring the Effect of Outliers on Mean, Median, and Mode			
Identifies outlier(s) in a data set Number of baskets scored by a basketball player in 8 games: 6, 7, 5, 6, 14, 6, 4, 3 The outlier is 14.	Determine the mean for a data set with and without the outlier Order the data: 3, 4, 5, 6, 6, 6, 7, 14 With the outlier, the mean is 6.375. 3, 4, 5, 6, 6, 6, 7 Without the outlier, the mean is 5.286.	Explains whether the outlier should be included when the mean is calculated 3, 4, 5, 6, 6, 6, 7, 14 The outlier should not be included because only 2 numbers in the data set are greater than the mean when the outlier is included.	Identifies the effects of an outlier on the median and mode 3, 4, 5, 6, 6, 6, 7, 14 The median is 6. The mode is 6. 3, 4, 5, 6, 6, 6, 7 The median is 6. The mode is 6. The outlier does not affect the median or mode.
Observations/Documentation			