NCTM Standards and Expectations

DATA ANALYSIS STANDARDS
GRADES 6-8

NCTM STANDARDS	6-8 NCTM EXPECTATIONS
Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them	• Formulate questions, design studies, and collect data about a characteristic shared by two populations or different • Select, create, and use appropriate graphical representations of data, including histograms, box plots, and scatterplots
Select and use appropriate statistical methods to analyze data	• Find, use, and interpret measures of center and spread, including mean and interquartile range • Discuss and understand the correspondence between data sets and their graphical representations, especially histograms, stem-and-leaf plots, box plots, and scatterplots
Develop and evaluate inferences and predictions that are based on data	• Use observations about differences between two or more samples to make conjectures about the populations from which the samples were taken • Make conjectures about possible relationships between two characteristics of a sample on the basis of scatterplots of the data and approximate lines of fit • Use conjectures to formulate new questions and plan new studies to answer them

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