



BROWNELL TALBOT

Grade 6 Prioritized Math Standards

The prioritized standards listed align with both the NCTM (National Council for Teachers of Mathematics) and the Nebraska State Standards. The NCTM also includes a set of Process Standards for grades preschool through 12 that highlight mathematical processes that students draw on to acquire and use their content knowledge (see the link on the next page).

Number & Operations	
Understand numbers, ways of representing numbers, relationships among numbers, and number systems	<p>Work flexibly with fractions, decimals, and percents to solve problems; compare and order fractions, decimals, and percents efficiently and find their approximate locations on a number line</p> <p>Develop meaning for percents greater than 100 and less than 1; understand and use ratios and proportions to represent quantitative relationships</p> <p>Develop an understanding of large numbers and recognize and appropriately use exponential notation</p>
Understand meanings of operations and how they relate to one another	Understand the meaning and effects of arithmetic operations with fractions, decimals, and integers
Compute fluently and make reasonable estimates	Select appropriate methods and tools for computing with fractions and decimals from among mental computation, estimation, calculators or computers, and paper and pencil, depending on the situation, and apply the selected methods
Algebra	
Represent and analyze mathematical situations and structures using algebraic symbols	Develop an initial conceptual understanding of different uses of variables
Use mathematical models to represent and understand quantitative relationships	Model and solve contextualized problems using various representations, such as graphs, tables, and equations.
Analyze change in various contexts	Compare situations with constant or varying rates of change.
Geometry	
Specify locations and describe spatial relationships using coordinate geometry and other representational systems	Determine location, orientation, and relationships on the coordinate plane
Measurement	
Apply appropriate techniques, tools, and formulas to determine measurements	Select and apply techniques and tools to accurately find length, area, volume, and angle measures to appropriate levels of precision
Data Analysis & Probability	
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 characteristics within one population
Select and use appropriate statistical methods to analyze data	Find, use, and interpret measures of center and spread, including mean and interquartile range
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