

## SIXTH GRADE MINNESOTA ACADEMIC STANDARDS IN MATHEMATICS

STRAND	STANDARDS
<b>NUMBER &amp; OPERATION</b>	Read, write, represent and compare positive rational numbers expressed as fractions, decimals, percents and ratios; write positive integers as products of factors; use these representations in real-world and mathematical situations.
	Understand the concept of ratio and its relationship to fractions and to the multiplication and division of whole numbers. Use ratios to solve real-world and mathematical problems.
	Multiply and divide decimals, fractions and mixed numbers; solve real-world and mathematical problems using arithmetic with positive rational numbers.
<b>ALGEBRA</b>	Recognize and represent relationships between varying quantities; translate from one representation to another; use patterns, tables, graphs and rules to solve real-world and mathematical problems.
	Use properties of arithmetic to generate equivalent numerical expressions and evaluate expressions involving positive rational numbers.
	Understand and interpret equations and inequalities involving variables and positive rational numbers. Use equations and inequalities to represent real-world and mathematical problems; use the idea of maintaining equality to solve equations. Interpret solutions in the original context.
<b>GEOMETRY &amp; MEASUREMENT</b>	Calculate perimeter, area, surface area and volume of two- and three-dimensional figures to solve real-world and mathematical problems.
	Understand and use relationships between angles in geometric figures.
	Choose appropriate units of measurement and use ratios to convert within measurement systems to solve real-world and mathematical problems.
<b>DATA ANALYSIS &amp; PROBABILITY</b>	Use probabilities to solve real-world and mathematical problems; represent probabilities using fractions, decimals and percents.