

3501.0730 GRADE 6 STANDARDS.**Subpart 1. Number and operation.**

A. The student will read, write, represent, and compare positive rational numbers expressed as fractions, decimals, percents, and ratios. The student will write positive integers as products of factors. The student will use these representations in real-world and mathematical situations.

B. The student will understand the concept of ratio and its relationship to fractions and to the multiplication and division of whole numbers. The student will use ratios to solve real-world and mathematical problems.

C. The student will multiply and divide decimals, fractions, and mixed numbers. The student will solve real-world and mathematical problems using arithmetic with positive rational numbers.

Subp. 2. Algebra.

A. The student will recognize and represent relationships between varying quantities. The student will translate from one representation to another. The student will use patterns, tables, graphs, and rules to solve real-world and mathematical problems.

B. The student will use properties of arithmetic to generate equivalent numerical expressions and evaluate expressions involving positive rational numbers.

C. The student will understand and interpret equations and inequalities involving variables and positive rational numbers. The student will use equations and inequalities to represent real-world and mathematical problems. The student will use the idea of maintaining equality to solve equations. The student will interpret solutions in the original context.

Subp. 3. Geometry and measurement.

A. The student will calculate perimeter, area, surface area, and volume of two- and three-dimensional figures to solve real-world and mathematical problems.

B. The student will understand and use relationships between angles in geometric figures.

C. The student will choose appropriate units of measurement and use ratios to convert within measurement systems to solve real-world and mathematical problems.

Subp. 4. Data analysis and probability. The student will use probabilities to solve real-world and mathematical problems. The student will represent probabilities using fractions, decimals, and percents.

Statutory Authority: *MS s 120B.023*

History: *33 SR 507*

Published Electronically: *October 3, 2013*