



**KENOSHA UNIFIED SCHOOL DISTRICT NO. 1
INSTRUCTIONAL SERVICES**

**STANDARDS AND BENCHMARKS
MATHEMATICS**

GRADE 6
STANDARD A: MATHEMATICAL PROCESSES
Representation, Reasoning, Problem Solving
Communication, Connections
<i>I can use reasoning and logic to create questions, write problems, and explain answers.</i>
A-1.6
<i>I can explain the answers to problems using correct math vocabulary, symbols, pictures, charts, tables, diagrams, graphs, and models.</i>
A-2.6
<i>I can determine the reasonableness of answers.</i>
A-3.6
<i>I can read and interpret mathematical text and other mathematical representations in real-world context (e.g., numbers, symbols, diagrams, and models).</i>
A-4.6
<i>I can use a computer or a calculator as a problem-solving tool.</i>
A-5.6
STANDARD B: NUMBER OPERATIONS AND RELATIONSHIPS
Number Concepts
Number Computation
<i>I can represent numbers using words, numerals, number lines, arrays, and expanded form.</i>
B-1.6
<i>I can read whole numbers to the ten millions.</i>
B-2.6
<i>I can write numbers to the ten millions.</i>
B-3.6
<i>I can express numbers in expanded form (e.g., $12.09=10+2+.09$ and $12.09=13-.91$).</i>
B-4.6
<i>I can identify place value in numbers to the ten millions.</i>
B-5.6
<i>I can identify place value in decimals to the thousandths place.</i>
B-6.6
<i>I can compare and order decimals (to the hundredths place) and use symbols $<$, $>$, and $=$.</i>
B-7.6
<i>I can identify prime and composite numbers.</i>
B-8.6

Most essential benchmarks appear in bold, italicized print.

GRADE 6
<i>I can find the least common multiple (LCM) of two numbers.</i>
B-9.6
<i>I can find factors for numbers greater than 100.</i>
B-10.6
<i>I can find the greatest common factor (GCF) of two numbers.</i>
B-11.6
<i>I can identify the divisibility of numbers (divisors of two through six, nine, and ten).</i>
B-12.6
<i>I can find the prime factorization of a number.</i>
B-13.6
<i>I can compare and order a set of fractions and use symbols $<$, $>$, and $=$.</i>
B-14.6
<i>I can simplify fractions and mixed numbers.</i>
B-15.6
<i>I can identify equivalent forms of fractions, decimals, and percents.</i>
B-16.6
<i>I can write fractions, decimals, and percents in equivalent forms.</i>
B-17.6
<i>I can estimate the sum, difference, and product of whole numbers; common fractions; mixed numbers; and decimals to hundredths.</i>
B-18.6
<i>I can use benchmark percents (e.g., 25 percent, 50 percent) in solving problems.</i>
B-19.6
<i>I can write ratios and set up proportions (e.g., scale drawings, similar figures, and indirect measurement).</i>
B-20.6
<i>I can compare and order integers using "manipulatives" (e.g., number line).</i>
B-21.6
<i>I can solve whole-number division problems with two-digit divisors and multidigit dividends.</i>
B-22.6
<i>I can add decimals including thousandths.</i>
B-23.6
<i>I can subtract decimals including thousandths.</i>
B-24.6
<i>I can multiply decimals, including thousandths.</i>
B-25.6

GRADE 6
<i>I can divide decimals, including hundredths, by single-digit whole-number divisors.</i>
<i>B-26.6</i>
<i>I can add mixed numbers and fractions with like and unlike denominators.</i>
<i>B-27.6</i>
<i>I can subtract mixed numbers and fractions with like and unlike denominators.</i>
<i>B-28.6</i>
<i>I can find square roots of perfect squares (e.g., $\sqrt{4}$, $\sqrt{16}$, $\sqrt{144}$).</i>
<i>B-29.6</i>
<i>I can determine the reasonableness of answers.</i>
<i>B-30.6</i>
<i>I can use mental math.</i>
<i>B-31.6</i>
STANDARD C: GEOMETRY AND SPATIAL SENSE
Two- and Three-Dimensional Figures
Spatial Relationships and Transformations
Coordinate Systems
<i>I can identify and describe regular and irregular polygons up to eight sides and identify faces, edges, and vertices of three-dimensional figures.</i>
<i>C-1.6</i>
<i>I can draw and/or describe a plane figure using tangrams or graph paper.</i>
<i>C-2.6</i>
<i>I can identify three-dimensional figures from their nets (flat patterns).</i>
<i>C-3.6</i>
<i>I can identify and describe three-dimensional figures from multiple perspectives.</i>
<i>C-4.6</i>
<i>I can identify figures that are congruent and/or similar and use proportions to find unknown measures.</i>
<i>C-5.6</i>
<i>I can divide a polygon into triangles by drawing diagonals from a single vertex.</i>
<i>C-6.6</i>
<i>I can draw and identify lines of symmetry.</i>
<i>C-7.6</i>
<i>I can identify parallel, perpendicular, and skew lines.</i>
<i>C-8.6</i>
<i>I can name, classify, and draw angles (e.g., acute, right, obtuse, straight).</i>
<i>C-9.6</i>
<i>I can find the sum of the measures of the angles in a triangle.</i>
<i>C-10.6</i>

GRADE 6
<i>I can use translations, reflections, and rotations to transform geometric shapes.</i>
C-11.6
<i>I can identify, locate, and plot coordinates in the four quadrants.</i>
C-12.6
STANDARD D: MEASUREMENT
Measurable Attributes/Units
Direct Measurement
Indirect Measurement
<i>I can determine elapsed time in problem-solving situations.</i>
D-1.6
<i>I can select appropriate units of measure (U.S. customary and metric) to estimate the length of objects.</i>
D-2.6
<i>I can select appropriate unit of time.</i>
D-3.6
<i>I can select appropriate units of measure (U.S. customary and metric) to estimate liquid capacity and volume.</i>
D-4.6
<i>I can select appropriate unit of measure (U.S. customary and metric) to estimate the weight/mass of objects.</i>
D-5.6
<i>I can select and use appropriate measurement tools (e.g., ruler and protractor).</i>
D-6.6
<i>I can measure with the appropriate degree of precision (1/4, 1/8, or 1/16 inch) or nearest centimeter or millimeter.</i>
D-7.6
<i>I can compute linear measurement conversions (e.g., inches to yards, feet to yards, and centimeters to meters).</i>
D-8.6
<i>I can compute liquid capacity conversions (e.g., quarts to gallons).</i>
D-9.6
<i>I can approximate conversions of units between metric and U.S. customary systems (e.g., quart to liter and yard to meter).</i>
D-10.6
<i>I can measure and draw angles up to 180 degrees.</i>
D-11.6
<i>I can find the perimeter of squares, rectangles, triangles, and parallelo-grams given the side lengths.</i>
D-12.6
<i>I can find the area of squares, rectangles, right triangles, and parallelograms.</i>
D-13.6
<i>I can find the circumference of a circle.</i>
D-14.6

GRADE 6
<i>I can estimate the area of a regular polygon given a reference.</i>
<i>D-15.6</i>
<i>I can determine the distance between two points given a scale (e.g., maps).</i>
<i>D-16.6</i>
STANDARD E: STATISTICS AND PROBABILITY
Data Analysis and Statistics
Probability
<i>I can display and analyze data in frequency tables and histograms.</i>
<i>E-1.6</i>
<i>I can display and analyze data in bar and line graphs.</i>
<i>E-2.6</i>
<i>I can make and analyze data in line and stem-and-leaf plots.</i>
<i>E-3.6</i>
<i>I can determine if a graph is misleading.</i>
<i>E-4.6</i>
<i>I can find the range, mean, median (odd number of data), and mode of a data set.</i>
<i>E-5.6</i>
<i>I can use probabilities to estimate outcomes and evaluate fair and unfair simple events.</i>
<i>E-6.6</i>
<i>I can explain the effects of additional data and outliers.</i>
<i>E-7.6</i>
<i>I can use appropriate vocabulary to describe the probability of chance events.</i>
<i>E-8.6</i>
<i>I can find the experimental probability of an independent event (e.g., spinning a spinner or flipping a coin).</i>
<i>E-9.6</i>
<i>I can describe and determine the number of combinations of selecting three items from four or more items.</i>
<i>E-10.6</i>
<i>I can make an organized list to find all possible outcomes.</i>
<i>E-11.6</i>
<i>I can use data from experiments to solve and interpret probability problems.</i>
<i>E-12.6</i>
STANDARD F: ALGEBRAIC RELATIONSHIPS
Patterns, Relations, and Functions
Expressions, Equations, Inequalities
Properties
<i>I can determine the rule of a one-operation function table with numbers 0 through 100.</i>
<i>F-1.6</i>

GRADE 6
<i>I can complete patterns using pictures and numbers.</i>
F-2.6
<i>I can complete a two-variable function table using addition and subtraction.</i>
F-3.6
<i>I can extend a function table using one operation.</i>
F-4.6
<i>I can describe the pattern in a function table.</i>
F-5.6
<i>I can describe a real-world trend represented by a graph or table.</i>
F-6.6
<i>I can write an algebraic expression with one or two operations which represents a linear pattern.</i>
F-7.6
<i>I can correctly use mathematical symbols of equality and inequality (e.g., $<$, $>$, and $=$).</i>
F-8.6
<i>I can translate a mathematical expression from words into numbers and symbols.</i>
F-9.6
<i>I can substitute whole numbers for variables in an expression and find its value.</i>
F-10.6
<i>I can substitute numbers into a formula and evaluate.</i>
F-11.6
<i>I can write a one-step linear equation to represent a problem.</i>
F-12.6
<i>I can solve a one-step single variable equation with whole number coefficients (e.g., $2x=10$).</i>
F-13.6
<i>I can use the distributive property to evaluate a whole-number expression (e.g., $3[4+2]=3[4]+3[2]$).</i>
F-14.6
<i>I can use the commutative property to change the order of numbers in an expression.</i>
F-15.6
<i>I can solve three-step order-of-operation expressions using parentheses and exponents.</i>
F-16.6