



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

MIDDLE SCHOOL COURSE SYLLABUS

MATHEMATICS

Grade 7 Pre-algebra

Prerequisites

Students should meet at least 2 of the following in addition to teacher recommendation:

- Grade of A or B+ in Grade 6 mathematics using challenge problems and “C” level activities
- Results of WKCE and IAAT
- Evidence of mastery of Most Essential Benchmarks (Grade 6)

Course Description

Pre-Algebra builds upon the essential skills of arithmetic as they apply to algebra. Real numbers and linear equations, linear inequalities, factoring, fractions, graphing and some elements of geometry are stressed in preparation for a rigorous course in Algebra 1.

Relevance

Pre-Algebra will provide students the foundation in algebra, geometry, and problem solving that is needed for success in Algebra 1. Integrated print and technology resources will help all students build confidence in problem-solving skills.

Course Standards

- | | | |
|---------------------------|----------------|-------------------------------|
| A. Mathematical Processes | C. Geometry | E. Statistics and Probability |
| B. Number Relationships | D. Measurement | F. Algebraic Relationships |

Most essential benchmarks may be viewed at: www.kusd.edu.

Lifelong Learning Standards

- | | | |
|------------------------|--------------------------|------------------------|
| • Knowledgeable person | • Effective communicator | • Quality producer |
| • Complex thinker | • Self-directed learner | • Contributing citizen |

Lifelong learning benchmarks may be viewed at: www.kusd.edu.

Course Outline

Quarter 1

- Variables, Expression, Integers: expressions using variables, exponents, integers and the order of operations.
- Solving Equations: linear equations using addition, subtraction, multiplication, and division.
- Multi-step Equations and Inequalities: equations involving variables on both sides and basic inequalities.

Quarter 2

- Factors, Fractions, and Exponents: factors, rules of exponents, GCF, LCM, and scientific notation.
- Rational Numbers and Equations: fraction operations and equations involving rational numbers
- Ratio, Proportion: ratios, proportions, similarity, and scale drawings
- Percents: fractions, decimals, percents, simple and compound interest

Quarter 3

- Linear Functions: linear equations, intercepts, slope, and linear inequalities
- Real Numbers and Right Triangles: square roots, Pythagorean Theorem, distance and midpoint formulas
- Measurement, Area, and Volume: area, circumference, surface area, and volume of various polygons and solids

Quarter 4

- Angle Relationships and Transformations: angle relationships, parallel lines, translations, reflections, and symmetry
- Dealing with Data: scatter plots, box plots, stem-and-leaf plots, and histograms, mean, median, mode, quartile, range, samples and population of data.
- Data Analysis and Probability: permutations, combinations, disjoint and overlapping events, and independent/dependent events

Board-Approved Instructional Materials

Larson, *Pre-Algebra*, McDougal Littell, 2005 (ISBN 0-618-25003-4)

Online book: classzone.com (user name and password required and provided by teacher)

Online resources: classzone.com (no registration required) – Choose Math, Middle School, WI, Pre-algebra.

Parents as Partners

Family involvement is an essential element for a student's success in mathematics. Be positive and support homework, don't do it. Think of yourself as a guide rather than your child's teacher. You can help by asking questions and listening. You may also help by visiting the online resources and encouraging your child to take advantage of the tutorials, interactive activities, and other online resources listed above.

Methods of Assessment

KUSD Common Assessments; unit assessments; quizzes; projects

Board-Approved Grading Scale

Excerpts taken from School Board Rule 6452

GRADING SCALE

A+=98-100 percent	B+=86-89 percent	C+=76-79 percent	D+=66-69 percent
A=93-97 percent	B=83-85 percent	C=73-75 percent	D=63-65 percent
A-=90-92 percent	B-=80-82 percent	C-=70-72 percent	D-=60-62 percent
			F=0-59 percent

MAKE-UP WORK

Students submitting work up to ten school days late without prior approval may receive up to two grades lower on the work than they would have received if the work had been submitted on time (i.e., B+ lowered to a D+). Student work submitted after ten school days without prior approval shall not be accepted for credit and shall be recorded with a score of zero.

Upon returning to school after an absence, a student has the responsibility within the number of days equal to the length of the absence or suspension to meet with the teacher to develop a plan for making up missed work, quizzes, and examinations. A truant student has the responsibility on the first day he or she returns to the course/class to meet with the teacher to develop a plan for making up missed work, quizzes, and examinations. Lower grades may not be given for late work due to excused absences, suspension, or truancy unless the work is submitted later than agreed upon deadlines.

See Rule 6452 in its entirety at: www.kusd.edu.