



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

**MIDDLE SCHOOL COURSE SYLLABUS**

**Mathematics  
Grade 8 Pre-algebra**

**Course Description**

Students extend their study of mathematical topics into pre-algebra skills. They explore the principles of algebra through a variety of topics, such as graphs, functions, sequences, perimeter, area, volume, geometry, equations, probability and statistics. Reading, writing, and problem solving are included throughout the year.

**Relevance**

Students who master the most essential benchmarks of Grade 8 pre-algebra will be prepared for the rigor of Algebra 1 at high school. They will have a foundation in the basic principles of algebra including integers, graphing, ratios, proportions, and problem-solving strategies.

**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](http://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](http://www.kusd.edu).

**Course Outline**

**Quarter 1:**

- Chapter 1 Principles of Algebra: expressions, integers, equations, inequalities
- Chapter 2 Rational Numbers: add, subtract, multiply, divide (Pre-assess and review)
- Chapter 3 Graphs, Functions, and Sequences: tables, graphs, functions, sequences
- Section 12.2 Slope: Find the slope of a line and use slope to understand and draw graphs

**Quarter 2:**

- Chapter 4 Properties of Exponents, Scientific Notation, Square root, Pythagorean Theorem
- Chapter 5 Ratios and Proportions, Dimensional Analysis, Similarity, Indirect Measurement
- Chapter 6 Decimals, Fractions, Percents, Simple Interest

**Quarter 3:**

- Chapter 7 Points, Planes, Angles, Parallel and Perpendicular Lines, Angles, Triangles, Polygons, Congruence, Transformations, Symmetry, Coordinate Geometry
- Chapter 8 Perimeter, Area, Volume and Surface Area, Circles, Three-Dimensional Drawings

#### **Quarter 4:**

Chapter 9 Samples, Surveys, Organizing Data, Central Tendency, Displaying Data, Misleading Graphs, Scatter Plots, Choosing a Best Representation of Data

Chapter 10 Probability, Independent and Dependent Events, Making Predictions, Calculating Odds, Counting Principle, Permutations, Combinations

Chapter 11 Solving Equations

#### **Board-Approved Instructional Materials**

Bennett, Burger, et al., Middle School Mathematics Course 3, Holt, 2007

ISBN #0030385423

Online book and resources: [www.thinkcentral.com](http://www.thinkcentral.com) Choose Mathematics...Holt Mathematics (user name and password required and provided by teacher)

Free Holt Online resources: [www.thinkcentral.com](http://www.thinkcentral.com) – Enter the Keyword: **MT7parent** in the Go resources box at the bottom of the page

#### **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 for them. 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. For those without home web access, the Holt One Stop CD is available for check out from your child's classroom teacher or the middle school library.

#### **Methods of Assessment**

KUSD quarterly common assessments; quizzes, unit assessments

#### **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](http://www.kusd.edu).**