

Algebra I

Gr. 9 – 12 Elective

Algebra I establishes the groundwork for the study of higher-level math classes. The relations and properties are dealt with in the domain of real numbers, which includes rational and irrational numbers.

Topics Covered:

- Review of Operations with Integers, Decimals, and Fractions
- Verbal and Algebraic Models
- The Distributive Property
- Simplifying and Evaluating Expressions
- Solving Linear Equations and Inequalities
- Graphing Linear Equations and Inequalities
- Writing Equations of Lines
- Exponent Rules
- Simplifying Radicals
- Solving Quadratic Equations using Radicals
- Polynomial Operations

General Information

Each course is 2 trimesters in length. Each trimester corresponds to 1 credit of mathematics.

Students are required to complete 6 credits of mathematics in order to graduate from DNH.

Students are required to obtain at least a “C” or better in order to advance to the next class

Students are required to have a scientific calculator for all of the classes listed in this brochure.



High School Mathematics

- *General Math
- *Consumer Math
- *Pre – Algebra
- *Algebra I

Dike-New Hartford CSD

DNH CSD

330 Main St., Dike, IA 50624

<http://www.dnhcsd.org>

Pre – Algebra
Gr. 9 – 12 Elective

Pre – Algebra weaves three themes – applied arithmetic, pre-algebra, and pre-geometry – by focusing on arithmetic operations in mathematics and the real world. Basic arithmetic and algebra skills are connected to corresponding geometry topics.

Topics Covered:

- Algebraic Expressions and Integers
- Solving One-Step Equations and Inequalities
- Operations and Equations with Decimals
- Factors, Fractions, and Exponents
- Operations with Fractions
- Ratios, Proportions, and Percents
- Solving Two-Step Equations and Inequalities with Integers, Decimals, and Fractions
- Area and Volume
- Data Analysis and Probability

Consumer Math
Gr. 10 – 12 Elective

Consumer math is offered as a terminating math course. The objective is to review basic math skills that are essential to everyday adult living and work with applications of these skills to consumer topics.

Topics Covered:

- Banking Procedures
- Budgeting
- Interest Payments
- Insurance
- Use of Credit Cards
- Personal Income
- General Purchasing
- Stocks and Bonds
- Household Expenses
- Tax Returns
- Consumer Credit
- Measurement
- Graph Interpretation

General Math
Gr. 9 – 10 Elective

General math emphasizes the basic applications of our number system. Math principles concerning symbols, whole numbers, estimation, fractions, decimals, percents, the metric system and problem-solving strategies are studied. Everyday use of mathematics is the underlying theme.

Topics Covered:

- Number Operations
- Measurement
- Area
- Volume
- Angles
- Similar Triangles
- Solving Simple Equations
- Solution Sets
- Graphs