



Grand Haven High School

Honors Algebra I A/B

Course Number: E21 A&B

Grade Level: 7th-9th

Credits : 1 credit

Prerequisite Courses :

Course Description

Honors Algebra IA builds upon knowledge to recognize and solve mathematical and real-world problems involving linear relationships. It builds upon the skills of making sense of and moving fluently between graphic, numeric, symbolic, and verbal representations on patterns. It builds on the approach to the study of functions and representations begun in the middle grades. This is done by broadening the study of linear relationships to include systems of equations with two unknowns, and function notation.

Honors Algebra IB builds upon knowledge of linear patterns of change and familiarity with nonlinear patterns such as exponential and quadratic. The knowledge of exponential and quadratic function families is extended and deepened by including topics such as rules of exponentiation, operations and factoring polynomials, and standard and vertex forms of quadratic equations and the applications they model.

Course Objectives

Throughout the course, you will meet the following goals:

- *Understand the properties of the real number system
- *Use variables to represent quantities that are unknown, can change, or are dependent on other quantities
- *Write, evaluate, simplify, and manipulate algebraic expressions, equations, and inequalities
- *Model real-world phenomena with the language of algebra
- *Represent relationships between quantities symbolically and graphically and make use of both representations to solve problems
- *Communicate about reasoning mathematically and evaluate the mathematical reasoning of others

Building Behavioral Expectations

T.E.A.M. GH ... One Team, One Family, One Grand Haven. Be Kind. Always.

It is our expectation that ALL GHHS students, staff and parents will ... always give their best **EFFORT** in everything that they do, work hard to be **INCLUSIVE** of each other, show **RESPONSIBILITY** in class, the hallways, cafeteria and at events, and **WORK TOGETHER** at all times!

We are Always a TEAM in Buccaneer Country!

Together, Excellence, Accountability, Mindfulness ... GO BUCS

Student Expectations

Students are expected to be positive active participants in their education, including completion of all assigned work, and best effort on quizzes and tests.

Communication

Each teacher for this course will maintain and active Google Classroom to assist students in their learning. Teachers will also be available through email or phone.

Grading Policy

Test: 60%

Quizzes: 25%

Assignments: 15%

Scope and Sequence

1st Semester

Ch 1 Solving Linear Equations

Ch 2 Solving Linear Inequalities

Ch 3 Graphing Linear Functions

Ch 4 Writing Linear Functions

Ch 5 Solving Systems of Equations

2nd Semester

Ch 6 Exponential Functions and Sequences

Ch 7 Polynomial Equations and Factoring

Ch 8 Graphing Quadratic Functions

Ch 9 Solving Quadratic Equations

Ch 10 Radical Functions and Equations

Ch 11 Data Analysis and Displays

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