

HS Algebra 8 (2023-2024)

Mr. Selk

Room 106

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Course Description: Algebra covers the following topics: algebraic patterns, algebraic order of operations, equations, proportional reasoning and statistics, linear functions, inequalities and absolute value, systems of equations and inequalities, exponents and exponential functions, polynomials and factoring, rational function, radical functions and coordinate geometry, probability, and functions and transformations.

Course Main Objectives:

- Students will learn how to write and use all applications of Linear Equations with an emphasis on Slope Intercept and it's functions.
- Students will learn how to solve and graph Linear Equations, Functions and Inequalities along with applications of Linear Systems.
- Students will learn how to Simplify and Evaluate polynomials, expressions and Linear Equations and Inequalities.
- Students will learn how to use and solve equations and functions with the Quadratic Formula and all it's applications.
- Students will learn how to use and model all the applications of Factoring Polynomials

Supplies Needed:

Notebook

Pencils and/or pens

Scientific Calculator

Course Requirements: Students will be required to:

Complete daily work in and out of class.

Take notes on class lectures and complete Guided Notes.

Take chapter tests and quizzes.

Grading: Letter grades will be given on the following percentages:

A	94-100	C	74-76
A-	90-93	C-	70-73
B+	87-89	D+	67-69
B	84-86	D	64-66
B-	80-83	D-	60-63
C+	77-79	F	0-59

*Generally daily assignments will be worth 10 points, and there are usually 6-8 per chapter. The quizzes will be worth 50 points, and the chapter test will be worth 100 points.

*Late assignments will not receive full credit.

*If you are absent for any reason, it is your responsibility to find out what you missed and make it up within 2 days for each absence without losing points.

Classroom Policies: (ABSOLUTELY NO CELL PHONES OR EARBUDS OF ANY SORT)

- Cell phones WILL be stored in phone pocket holder at all times.....no exceptions!!
- Be on time.....Be prepared.....learn something every day!!
- BE RESPECTFUL!!!!

Course Outline:

Chapter 1: Connections to Algebra

Chapter 2: Properties of Real Numbers

Chapter 3: Solving Linear Equations

Chapter 4: Graphing Linear Equations and Functions

Chapter 5: Writing Linear Equations

Chapter 6: Solving and Graphing Linear Inequalities

Chapter 7: Systems of Linear Equations and Inequalities

Chapter 8: Exponents and Exponential Functions

Chapter 9: Quadratic Equations and Functions

Chapter 10: Polynomials and Factoring

Chapter 11: Rational Equations and Functions

Chapter 12: Radicals and Connections to Geometry

Final Grading: These grades will be based on a combination of tests, quizzes, daily assignments in/out of class and will be based on total cumulative points.

60% Summative Assessments (tests and quizzes)

40% Formative Assessments (daily assignments)