

Twin Falls School District

Math/Algebra I

Grades 8 - 12



Course Description: First semester, the course focuses on expressions, functions, rational numbers, and solving, graphing and analyzing linear equations and inequalities. Second semester, the course focuses on operations with polynomials, factoring, quadratic equations, rational expressions, radical expressions and the quadratic formula. This is a year long class.

Instructional Philosophy: Students in Algebra I should expect daily homework. Students are expected to comply with all district, building, and classroom policies.

Power Standards:

Standard 1: Operations with Real Numbers

Students deepen their understanding of real numbers by simplifying, evaluating, and translating expressions using properties of real numbers and order of operations.

Standard 2: Linear Equations and Inequalities

Students solve linear equations and inequalities and rearrange formulas.

Students translate and solve word problems involving linear equations, inequalities, and formulas.

Standard 3: Relations and Functions

Students draw and interpret graphs of relations.

Students understand the concept of a function, find domain and range, and write equations for functions.

Standard 4: Graphing Linear Equations and Inequalities

Students draw graphs of lines and relate their equations to their slopes and intercepts.

Students model situations with linear equations and linear inequalities and use them to make predictions.

Standard 5: Systems of Linear Equations and Inequalities

Students solve systems of linear equations in two variables using both graphical and algebraic methods.

Students use systems of linear equations to solve word problems, and they use graphs to solve systems of linear inequalities in two variables.

Standard 6: Polynomials and Quadratic Equations

Students add, subtract, multiply, and divide polynomials.

Students apply the properties of exponents including negative and zero exponents.

Students find factors of polynomials, learning special techniques for factoring quadratics.

Students solve quadratic equations.

Standard 7: Rational Expressions and Equations (Algebraic Fractions)

Students simplify rational expressions and solve equations containing rational expressions.

Standard 8: Radical Expressions and Equations

Students simplify radical expressions.

Students solve equations that contain radical expressions.

Students use the Pythagorean Theorem to solve problems involving a right triangle.

In all of the standards students use problem-solving skills: they choose how to approach a problem, they explain their reasoning, and they check their results to determine if they are reasonable. Throughout, students will investigate, describe and represent patterns. Students should read text, data, tables, and graphs with comprehension and understanding. Their writing should be coherent and they should use correct mathematical vocabulary. Connecting mathematical concepts includes linking new ideas to related ideas that were learned previously, helping students to see mathematics as a unified body of knowledge whose concepts build upon each other. Students should connect their mathematical learning to appropriate real-world contexts.

Major Course Projects and Assignments: Classroom projects may be assigned.

Assessment and Grading Plan: Grades are determined by performance on tests, quizzes, and assignments. A 3x5 note card will be allowed on unit tests depending on teacher's discretion. The Chapter tests from Glencoe will be used and modified according to teacher/classroom needs.

Grading Scale:	100 – 90	A	69 – 60	D
	89 – 80	B	59 & below	F
	79 – 70	C	Incomplete	I

Weighting of the Grade: Unit Tests, District Assessments, Finals 50%
Quizzes, assignments & other class work 50%
No extra credit will be allowed to inflate grades.

Policy for Re-Doing Work: Retakes for students scoring below 80% are available on most unit tests when a teacher criterion has been met. The maximum retake score will be 80%.

Late Work Policy: Late assignments will be accepted until the last week of the quarter, and the maximum score available on late work will be a 70%.

Homework Policy: Assignments (in-class/homework) are an important part of the grading component.

Opportunities for Extra Help: See teacher for extra help opportunities.

Grading Rubrics: Classroom project rubrics will be given when projects are assigned.