TIME	CONTENT	SKILLS	ASSESSMENTS
September	**UNIT 1: Coordinate Geometry/Transformational Geometry** • What does transform mean? • What did Pythagoras discover about a right triangle? • Where/when can we apply these skills in the real world? -------- • Transformation • Similarity • Symmetry • Congruency • Reflection • Rotation • Dilation • Translation • Preserved • Not preserved	• Transform figures by reflection, translation, rotation, and dilation • Identify parts of a right triangle • Apply the Pythagorean Theorem	• Tests • Quizzes • Journal entries • Benchmark

TIME	CONTENT	SKILLS	ASSESSMENTS
September	**UNIT 2: Number Theory*** • Why have divisibility rules? • How do you distinguish between rational and irrational numbers? • Number sets • Properties • Prime/composite • Divisibility rules	• Use divisibility rules • Identify the set to which a number belongs	• Tests • Quizzes • Journal entries
October	**UNIT 3: Integral Exponential Operations** • What is exponential notation? • What does integral refer to? • Common bases • Exponents	• Evaluate exponents • Recognize when to apply Order of Operations	• Tests • Quizzes • Journal entries • Benchmark

TIME	CONTENT	SKILLS	ASSESSMENTS
November	**UNIT 4: Expressions, Equations, and Inequalities** • How is math like a foreign language? • Coefficient • Variable • Inequality	• Solve multi-step inequalities and graph the solution on a number line • Translate English to math word problems to algebraic expressions/equations/inequalities and vice versa	• Tests • Quizzes • Journal entry • Benchmark
December	**UNIT 5: Operations With Polynomials** • What is a polynomial? • What differences exist between a linear equation and a quadratic equation? • Greatest common factor • Relationship between the distributive property and factoring	• Use the distributive property • Find the greatest common factor and factor algebraic expressions • Perform operations with polynomials • Factor a trinomial in the form $ax^2 + bx + c$	• Tests • Quizzes • Journal entries • Benchmark

TIME	CONTENT	SKILLS	ASSESSMENTS
January	**UNIT 6: Ratios, Proportions, and Percents** • What makes a person an educated consumer? • Conversion • Percents less than 1% and greater than 100% • Percent as a comparison to 100 • Unit rate	• Simplify ratios to prove equivalence • Use proportions for percent calculations, unit rate, and map scale distances • Use exchange rate table for monetary conversions • Estimate	• Tests • Quizzes • Midterm examination • Benchmark • Journal entries
February	**UNIT 7: Geometric Relationships** • Why are proofs important? • What is the difference between a formal and an informal proof? • Transversal • Parallel lines	• Identify, calculate, and determine angle pair relationships when given two parallel lines cut by a transversal • Use algebra to determine missing angle measurements	• Tests • Quizzes • Benchmark • Journal entry

TIME	CONTENT	SKILLS	ASSESSMENTS
February	**UNIT 8: Introduction to Linear Equations** • How can a line graph represent a real situation? • A table of values can represent a linear equation • A line consists of an infinite number of points • Positive vs. negative	• Graph linear equations using a table • Interpret graphs • Identify sign of slope	• Tests • Quizzes • Journal entry • Benchmark
March - April	**UNIT 9: Linear Equations** • How can you graph a line without a table of values? • Why is the slope of any given line a constant? • What is a system of equations? • Linear vs. nonlinear • System of equations • Rate of change as related to slope	• Graph a line using slope-intercept method • Determine the slope and y-intercept of a given line • Determine the solution given the graph of a system of equations • Recognize quadratics in table, graph, or equation form	• Tests • Quizzes • Benchmark • Journal entries

TIME	CONTENT	SKILLS	ASSESSMENTS
May	**UNIT 10: Functions and Relations** • How is a pasta/bread machine like a function? • How do you tell the difference between a relation and a function? • Function vs. relation • Domain vs. range • Function notation	• Use a vertical line test to determine a function • Use technical writing and mathematical language as related to function notation	• Tests • Quizzes • Benchmark • Journal entry
June	**UNIT 11: Constructions** • What are constructions? • Bisect • Equidistant	• Use a compass • Use a protractor • Replicate a procedure	• Tests • Quizzes • Benchmark • Final examination