

Course Title	Geometry							
Author	Math Department							
Statement of Outcome	Students learn the language of geometry, area and perimeter, inductive and deductive reasoning, geometric construction, geometric proof, right triangle trigonometry properties, angle properties, properties of parallel and perpendicular lines, coordinate geometry, triangle congruence, properties of triangles, and properties of quadrilaterals. Students calculate perimeter, area, surface area, and volume; solving right triangles; similar triangles; transformations; circle theorems; and, the effect that change has on perimeter, area, and volume measurements.							
Quadratics (Illustrative Math: Unit 2) Geometry (Reveal Curriculum: Units 1, 2, 3, 4, 5, 9 & 10)	Quadratics (2 weeks)	Tools of Geometry (1-2, 1-3, 1-4, 1-5, 1-7) (2 Weeks)	Angles and Geometric Figures (2-1, 2-2 ,2-3, 2-5) (2 Weeks)	Logical Arguments and Line Relationships (3-7, 3-8, 3-9, 3-10) (2 Weeks)	Synthetic Geometry and Transformations (4-1, 4-2, 4-3) (2 Weeks)	Triangles and Congruence (5-1, 5-2, 5-3, 5-4, 5-5, 5-6) (3 Weeks)	Right Triangles and Trigonometry (9-2, 9-4, 9-5, 9-6) (2 Weeks)	Circles (10-1, 10-2, 10-3, 10-4, 10-7) (2 Weeks)
Topic(s) and driving question.	Driving Question: How can we use the characteristics of quadratic functions to analyze and model real-world situations? Topics: Graphing and Identifying Characteristics Calculating Squares and Square Roots Solving Quadratics - Factoring - Completing the Square - Quadratic Formula Real World Applications - Falling Object Formula - Catenaries (St. Louis Arch)	Driving Question: How are points, lines, and segments used to model the real world? Topics: Points, Lines and Planes -Distance on a Number Line -Distance on the Coordinate Plane: - Midpoint Formula - Distance Formula	Driving Question: How are angles and two-dimensional figures used to model the real world? Topics: -Angle Congruence (Parallel lines and Transversals) - Vertical - Complementary - Supplementary - Alternate Interior - Alternate Exterior - Corresponding - Consecutive Interior -Perimeter, Circumference and Area -Measurements of 3-Dimensional Figures	Driving Question: What makes a logical argument, and how are logical arguments used in geometry? Topics: Parallel Lines and Transversals Slope and Equations of Lines Proving Lines Parallel Perpendiculars and Distance	Driving Question: How are rigid motions used to show geometric relationships? Topics: Reflections: Synthetic and Analytic - Across x-axis - Across y-axis - Across y=x Vector Translations Rotations about the origin	Driving Question: How can you prove congruence and use congruent figures in real-world situations? Topics: -Prove Triangles Congruent: SAS, ASA, SSS -Isosceles, Equilateral and Scalene Triangles - Properties of - Find Missing Measures	Driving Question: How are right triangle relationships useful in solving real-world problems? Topics: Proving the Pythagorean Theorem Properties of Special Right Triangles 30-60-90 Degree 45-45-90 Degree -Right Triangle Trigonometry and its Application	Driving Question: How can circles and parts of circles be used to model situations in the real world? Topics: Measuring Angles, Arcs and Chords Central and Inscribed Angles Degrees to Radians Equations of Circles Areas of Circles and Sectors
GX Focus	Persistence	Persistence	Persistence	Persistence	Persistence	Persistence	Persistence	Persistence
GP- Content Indicators	WSD.HS.MR.F.7: Use coordinates to prove simple geometric theorems algebraically	WSD.HS.MR.G.7: Use coordinates to prove simple geometric theorems algebraically	WSD.HS.MR.G.5: Understand and apply theorems about circles WSD.HS.MR.G.7: Use	WSD.HS.MR.G.2: Prove geometric theorems WSD.HS.MR.G.8:	WSD.HS.MR.G.1: Experiment with transformations in the plane	WSD.HS.MR.G.2: Prove geometric theorems WSD.HS.MR.G.8:	WSD.HS.MR.G.4: Define trigonometric ratios and solve problems involving	WSD.HS.MR.G.5: Understand and apply theorems about circles WSD.HS.MR.G.6:

			coordinates to prove simple geometric theorems algebraically	Apply geometric concepts in modeling situations	WSD.HS.MR.G.3: Make geometric constructions WSD.HS.MR.G.5: Understand and apply theorems about circles WSD.HS.MR.G.7: Use coordinates to prove simple geometric theorems algebraically	Apply geometric concepts in modeling situations	right triangles	Translate between the geometric description and the equation for a conic section
Summative Assessment Clarification:	Summative Assessment with questions pulled from the Unit Review. Quadratic Assessment	Unit 1	Summative Assessment with questions pulled from the Unit Review. Mod 2A Mod 2B Mod 2C	Summative Assessment with questions pulled from the Unit Reviews. Mod 3A	Summative Assessment with questions pulled from the Unit Reviews. Mod 4A	Summative Assessment with questions pulled from the Unit Review. Mod 5A	Summative Assessment with questions pulled from the Unit Review. Mod 9A	Summative Assessment with questions pulled from the Unit Review. Mod 10A
Link to Unit	Unit: Quadratics	Unit 1 Plan	Unit 2 Plan	Unit 3 Plan	Unit 4 Plan	Unit 5 Plan	Unit 9 Plan	Unit 10 Plan