

WELCOME TO CLASS

Welcome to Integrated Math 2: Geometry. My goal is to make the expectations in this class simple: I will teach the concepts, provide opportunities to practice, and give students regular chances to ask questions and demonstrate what they know.

The two most important habits for success are effort and communication. Students do not need to understand everything immediately. They do need to participate in the learning process and communicate when something does not make sense. Asking questions, using practice time well, and taking advantage of reassessment opportunities are the best ways to be successful.

Grades in this class are based on demonstrated mastery of the district Learning Intentions. Assessments may include tests, quizzes, projects, performance tasks, or other opportunities to show learning. Practice is designed to prepare students for those assessments rather than to add points to the gradebook.

WHAT CLASS USUALLY LOOKS LIKE

Starter: about 10 minutes | Main lesson: about 20 minutes | Remaining time: practice, Side Quests, questions, or reassessment preparation. Fridays include at least 30 minutes reserved for assessment and reassessment. Reassessment may also occur on other days when appropriate.

Practice & Homework

- Homework is practice and will not be collected for points.
- Assignment lists and answer keys will be posted in Google Classroom.
- Students should check their own work and come prepared to ask questions.
- On homework due days, selected problems will already be worked on the board and we will discuss the most useful or commonly challenging examples as a class.
- Additional in-class practice may be offered as Side Quests.

Assessment & Reassessment

- The course grade is based on district Learning Intentions and the evidence students provide through assessments.
- Reassessment opportunities are built into the regular class schedule, especially on Fridays.
- For an additional reassessment outside the scheduled in-class opportunity, students should complete the practice tied to that Learning Intention, self-check it with the posted key, complete the related Side Quest practice, and submit the short reassessment request form.
- The goal of reassessment is new evidence of learning, not additional points for completing paperwork.

Technology, Materials & Communication

- Bring a pencil every day. A charged school computer should also come to class, although it will not be used every day.
- Lined paper, highlighters, and other standard school supplies are helpful. Classroom calculators are available when needed.
- Phones are not permitted under school policy. Playing computer games during class results in an office referral.
- No Tech Tuesday: Chromebooks will not be used on Tuesdays in accordance with school policy.
- Google Classroom: assignment list and answer keys. Weekly Agenda: class links and what you missed. Infinite Campus: grades.
- After an absence, students are responsible for checking Google Classroom and the Weekly Agenda and communicating about anything they do not understand.
- Extra help is available before school and at lunch on Monday, Wednesday, and Thursday. After-school help is available by appointment.
- For family communication, use the district email convention: firstname.lastname@boiseschools.org.

WHAT WE WILL LEARN

This course blends geometric reasoning with algebra, probability, trigonometry, and functions.

Semester 1

Unit / Block	Topic	Students will learn
Unit 1	Prerequisite Review, Polygons, Area Models & Angle Relationships	Foundational algebra review; classifying polygons; area reasoning; angle pairs; parallel lines and transversals; triangle angle relationships.
Unit 2	Triangle Congruence, Proof & Similarity	Congruence, transformations, proof structures, triangle relationships, similarity, and proportional reasoning.
Unit 3	Probability Models, Compound Events & Expected Value	Probability models, compound events, tree diagrams, area models, simulations, and expected value.
Unit 4	Right-Triangle Trigonometry	Trigonometric ratios, slope ratios, tangent, sine, cosine, inverse trigonometry, and applications.
Unit 5	Factoring Expressions	Factoring with area models, factoring quadratics, factoring completely, and special cases.
Unit 6A	Quadratic Functions & Equations	Multiple representations of quadratics, zero product property, writing quadratic functions, and the beginning of solving quadratic equations.

Semester 2

Unit / Block	Topic	Students will learn
Unit 6B	Quadratic Functions, Equations & Complex Numbers	Completing the square, quadratic formula, applications, and introduction to complex numbers.
Unit 7	Special Right Triangles, Radicals & Fractional Exponents	45-45-90 and 30-60-90 triangles, Pythagorean triples, simplifying radicals, and fractional exponents.
Unit 8	Polygon Measures, Similar Figures & Introductory Circles	Perimeter and area, scale and similarity, circle measures, and geometric applications.
Unit 9	Transformations, Inequalities & Nonlinear Systems	Quadratic and absolute-value transformations, inequalities, and nonlinear systems.
Unit 10	Growth Rates, Piecewise, Combining & Inverse Functions	Average rate of change, comparing growth, piecewise functions, combining functions, and inverse functions.
Unit 11	Conditional Probability & Independence	Conditional probability, independence, two-way reasoning, and probability relationships.
Unit 12	Circles, Geometric Parabolas & Extensions	Equations of circles, geometric parabola connections, cumulative review, and end-of-year extensions.

IMPORTANT

This is a year-long roadmap. Pacing may shift as students need additional practice, school events occur, or assessment data shows that a topic needs more time. The Learning Intentions remain the destination even when the route changes.

Effort + communication + reassessment = the clearest path to success.