



All freshman are required to take a 60-75 minute mathematics placement exam.

- Students who **are not enrolled in a full year Algebra I course** will take the Algebra I Readiness Exam.
Calculators are NOT permitted on this exam.
- Students who **have completed a full year of Algebra I or are enrolled in a full year Algebra 1 course** will take the Algebra II Readiness Exam. **Calculators are permitted on this exam.**

The Math department will use these exam scores, high school placement exam scores, middle school GPA, and teacher recommendations to determine the appropriate math course placement for the fall. Students will be placed in one of the following courses: Algebra 1C, Algebra 1, Accelerated Algebra, Algebra II, or Algebra II Honors. You will be notified of your child's math placement when you receive their school schedule.

The Mathematics Department expects that Algebra and Accelerated Algebra students have mastered most of the topics for the Algebra Readiness Exam. Those students who have not demonstrated sufficient mastery of those skills will be placed into Algebra 1C.

The Algebra I Readiness Exam covers the following topics:

- Mathematical terminology, vocabulary, and notation
- Properties and sets of numbers
- Prime factorization
- Finding the GCF and the LCM of integers
- Order of operations
- Arithmetic, including fractions and decimals
- Ratios, proportions, and percents
- Operations with integers (adding, subtracting, multiplying, and dividing)
- Powers and square roots of integers
- Absolute value of integers
- Evaluating expressions
- Combining like terms
- Solving linear equations in one variable (including two step equations with distribution)
- Solving and graphing inequalities in one variable
- Graphing points and lines in the coordinate plane
- Basic Geometry--areas of circles and triangles and the Pythagorean theorem

**Please see next page for Algebra II readiness topics.*



The Mathematics Department expects that Algebra II students have mastered all of the topics described in Algebra I Readiness, in addition to the topics below. Students who have not demonstrated a mastery of these skills will be placed into Accelerated Algebra or Algebra 1.

The Algebra II Readiness exam emphasizes the following topics*

- Solving multi-step linear equations
- Graphing functions using a t-table
- Graphing and writing linear functions (all three forms)
- Solving and graphing linear inequalities in one and two variables
- Solving systems of linear equations and inequalities
- Simplifying and applying operations on monomials
- Operations with polynomials (adding, subtracting and multiplying)
- Powers of monomials and binomials
- Factoring polynomials
- Solving quadratic equations by factoring

**Note for Teachers:* Upon entrance to Marin Catholic, students placed in an Algebra II course are also expected to know the following topics. (These are the concepts usually covered at the end of Algebra 1, after the readiness exam.)

- Simplifying and performing operations on rational expressions
 - Simplifying and performing operations on radical monomial expressions
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