



Loyola High School

OF LOS ANGELES

All students are required to take the math placement exam on **Saturday, May 10th, at 8AM**. The math placement exam is a comprehensive exam assessing a full year of Algebra 1. Here is a [list](#) of topics assessed and some [sample questions](#). The exam consists of 45 questions, and students will have 60 minutes to complete the exam. Calculators are not allowed. Students should bring two sharpened #2 pencils. See FAQ handout below.

FAQ for Loyola's Freshman Math Program

(Updated February 2025)

Please read through these frequently asked questions, and email Mr. George Valverde at gvalverde@loyolahs.edu for further information..

What math course(s) do most freshmen take?

At Loyola High School, the goal is to have all freshmen complete a full year of Geometry / Honors Geometry, or higher level math. Therefore, those students who do not demonstrate mastery of Algebra 1 are *highly recommended* to take (or retake) Algebra 1 as freshmen, along with geometry. This means that many freshmen take two mathematics courses during the freshman year.

Why is Loyola doing this?

Math aptitude is a cornerstone of a strong college preparatory education. It fosters problem-solving skills, logical reasoning, and critical thinking - abilities that are essential for academic success and beyond. Additionally, math skills strengthen financial literacy, enhances technological understanding, and sharpens cognitive function by stimulating neural connections in a spatial framework.

Furthermore, to ensure students remain competitive in the college admissions process, particularly for highly selective universities, the double math program offers students the opportunity to take calculus in their senior year. Reaching calculus by senior year requires students to complete geometry by the start of their sophomore year.

Isn't it too much to ask for a student to take two math courses in one year?

Loyola's Algebra 1 and Geometry courses have been completely redesigned with these students in mind. The courses are not two separate entities but rather a single math experience taught over two periods with the same teacher. Additionally, it's precisely those students who have not mastered Algebra 1 who need extra time to do so. Giving an extra math period permits this critical development to happen in a reasonable amount of time.

Will a student taking both courses have twice the workload as other students?

Students assigned to both Algebra 1 and Geometry will have the same teacher with the same classmates, and thus not receive double the homework or tests.

Does every freshman who doesn't test out of Algebra 1 take two math classes?

Some students will be placed into a single Algebra 1 class with a required academic skills period. Other freshmen will be placed into the double math program (algebra 1 / geometry or accelerated algebra 1 / honors geometry) with a choice to "opt out" of geometry (honors geometry) and be placed into a singleton section of algebra 1 with an elective filling the other period. If a student is placed into double math then it is *highly recommended* that they enroll in both. Quantitative and qualitative data reveal that students who *complete geometry before the start of their sophomore year* excel in their math experiences at Loyola, and are better stationed for admittance into more selective universities.

How will Loyola determine whether a freshman must take Algebra 1?

The Algebra Placement Exam takes place on **Saturday, May 10th**, at 8AM. Loyola will not use grades from prior math courses, nor will it accept teacher recommendations or other documents to make decisions about whether a student must take (or retake) Algebra 1. The results of the Algebra Placement Exam will be combined with the math portion of the entrance exam (HSPT) before a final decision is made.

What is covered on the Algebra Placement Exam?

The Algebra Placement Exam is a comprehensive exam assessing a full year of Algebra 1. Here is a [list](#) of topics assessed with some [sample questions](#). The exam consists of 45 questions. Calculators are not allowed. Students should bring two sharpened #2 pencils.

What should students bring on the test date?

Students should bring two sharpened #2 pencils.

How many students will be admitted to each level of math?

Loyola does not set quotas for its freshman math courses. All students will be placed into the highest level of math for which they are qualified. On average, one-third of incoming freshmen pass the Algebra exam, and two-thirds do not pass, thereby being placed into Algebra 1/ Geometry, or Accelerated Algebra 1 / Honors Geometry..

How will I find out what math course(s) my son will be taking?

After a full week of taking the exam, Loyola will email your son's math placement directly to you. We will use the email address supplied in your original application package.

What will the students who pass the exam take as freshmen?

Those freshmen who pass the algebra placement exam will take a full year of Geometry, or Honors Geometry, and a full year of Performing Arts - Acting, Band, Music Appreciation, Piano, Introduction to Visual Arts, Computer Programming, or Makerspace 101.

What about students who come close to passing the placement exam, but don't quite succeed?

Students who show some, but not complete, mastery of Algebra 1 will be admitted into Accelerated Algebra 1 and Honors Geometry. Accelerated Algebra 1 skips the first several chapters of the book and moves much more quickly than regular Algebra 1. Additionally, some of these students may be invited to enroll in the "Algebra for Advanced Placement" course in summer school (see next entry).

What are the summer school options for students who don't pass the Algebra 1 placement exam?

Students who score just below the cutoff will be invited to take "Algebra for Advanced Placement" during summer school. This **invitation-only** course is used to supplement previous work in Algebra 1. At the end of the course, students will be given an alternative version of the Algebra placement exam, and those who pass will be enrolled in Honors Geometry or Geometry, depending on their score.

What if a student doesn't pass the Algebra 1 placement exam, but has already taken Geometry?

If a student does not show mastery of Algebra 1, he will need to retake Algebra 1 even if he has already passed Geometry. Because Algebra 1 and Geometry courses are inseparable, he will also take Geometry.

What if a student passes the Algebra 1 placement exam and wants to test out of Geometry?

A student can test out of Geometry only if they have Geometry on their 8th-grade transcript and will finish the course before graduation (June). We do not consider summer courses taken before 9th grade for advancement.

What if a student passes the Algebra 1 placement exam and has already completed Geometry?

Students will let us know which courses they have already completed on a survey taken during the Algebra 1 Placement Exam.

Loyola will verify this situation with a student's transcript **AND** the student will have to take a Geometry Placement Exam to be placed into Algebra 2 or Honors Algebra 2. on **Tuesday, May 20th at 5 PM**. Here is [a list of topics for the Geometry Placement Exam](#). The test is 1 hour long. Calculators are not allowed.

Students who test out of Geometry and would like to take Honors Algebra 2 are recommended to take the summer school course, "Intro to Honors Algebra 2" since Honors Algebra 2 is regarded as one of the most rigorous math courses we offer.

What if a student passes the Algebra 1 placement exam and has already completed Geometry AND Algebra 2.

If the student has already taken Algebra 2 as well, the student will return for a second test for placement into Pre-calculus or Honors Precalculus. We will set up an appointment for this test. Here is a [list of topics](#).

Can an incoming freshman take either Algebra 1 or Geometry at other high schools or online providers for credit?

Yes, but there are strong cautions. **Courses taken the summer prior to 9th grade will not be considered** for advancement. Courses taken outside of the students current school must be UC-approved. To determine whether an institution is accredited and the course is legitimate, parents should go to the University of California website at <https://hs-articulation.ucop.edu/agcourselist#/list/search/all> type in the school name and look for the particular math course. If the school and course do not appear on the website, Loyola will not accept it for credit. Students will need to present Loyola HS math department with official sealed transcripts from the institution or showing a passing grade.

Flowchart of typical math pathways at Loyola:

<u>9th grade</u>	(Summer)	<u>10th grade</u>		<u>11th grade</u>		<u>12th grade</u>
Algebra 1 & Ac. Skills or Elective	→	Alg 2*	→	Pre-Calculus*	→	Calculus* or Statistics*
Algebra 1 & Geometry	→	Alg 2*	→	Pre-Calculus*	→	Calculus* or Statistics*
Algebra 1A & Hon Geometry	→	Hon Alg 2	→	Hon Pre-Calc	→	AP Calculus AB or BC
Hon Geometry & Elective	→	Hon Alg 2	→	Hon Pre-Calc	→	AP Calculus AB or BC
Geometry & Elective	→	Alg 2*	→	Pre-Calculus*	→	Calculus* or Statistics *
Hon Alg 2 & Elective	→	Hon Pre-Calc	→	AP Calculus AB or BC	→	BC or Math elective**

*All students are tested at the end of each year to determine whether they are qualified to move into honors or AP courses the following year. Thus, it is possible for an exceptional student to move from Algebra 1 and Geometry one year into Honors Algebra 2 the following year. It is also possible for students to move in the opposite direction if the honors program proves too difficult for them.

**Currently available math electives include Honors Multivariable Calculus, AP Statistics, AP Computer Science A, and AP Computer Science Principles with more classes in development for the future.