

What math do you take in 11th grade? The course chart

The three tracks US schools run, what each 11th grade course contains, and how to choose when the school offers a choice. Most 11th graders are in Algebra 2; it is the track, not the remedial option.

The tracks, by grade (11th grade in bold column)

Track	8th	9th	10th	11th grade	12th
Standard (most students)	Pre-Algebra / Math 8	Algebra 1	Geometry	ALGEBRA 2	Pre-Calculus, Statistics, or none
Accelerated (about a third)	Algebra 1	Geometry	Algebra 2	PRE-CALCULUS or AP Precalculus	AP Calculus AB/BC or AP Statistics
Very accelerated (few)	Geometry	Algebra 2	Pre-Calculus	AP CALCULUS AB or BC	Multivariable, Linear Algebra, AP Statistics
Integrated Math (CA and others)	Math 8 / Integrated 1	Integrated 1	Integrated 2	INTEGRATED 3	Pre-Calculus or AP Calculus

What each 11th grade course contains

Course	Content	Leads to
Algebra 2	Functions as objects: polynomial, rational, radical, exponential and logarithmic functions; systems; sequences and series; intro trigonometry; probability basics	Pre-Calculus or Statistics in 12th; the SAT math section
Pre-Calculus / AP Precalculus	Algebra 2 taken further; full trigonometry (unit circle, identities, laws of sines and cosines); polar coordinates, vectors, matrices; limits as a preview	AP Calculus AB or BC in 12th
AP Calculus AB / BC	Limits, derivatives, integrals, the fundamental theorem, differential equations; BC adds series, parametric and polar	Multivariable calculus, dual enrollment
Statistics / AP Statistics	Data design, descriptive statistics, probability, sampling distributions, inference, regression	Social sciences, business, biology, nursing, data majors; widely credited
Integrated Math 3	Algebra 2 content with geometry and statistics interleaved	Pre-Calculus or AP Calculus in 12th

How to choose, when there is a choice

If your child	Take	Because
Got an A or B in Algebra 2; heading to engineering, physics, CS, economics, medicine	Pre-Calculus (AP Precalculus if offered)	It is the door to AP Calculus, which those majors expect
Got a C in Algebra 2	Pre-Calculus with support, or Algebra 2 topics revisited in the summer first	Pre-Calculus assumes the Algebra 2 gaps are closed
Heading to social sciences, business, nursing, biology, journalism	AP Statistics	More useful, widely credited, read as rigorous
Very accelerated and finding it hard	AP Calculus AB rather than BC	The grade matters more than the course name
In an Integrated school	Integrated 3; ask about 12th grade options in January	The 12th grade choice is where the decision is

Why junior year counts

The SAT is taken in spring of 11th grade by most students; its math is Algebra 1, Algebra 2, a little Geometry and data. An Algebra 2 student is learning the content and sitting the test in the same year: start SAT math practice by January. The transcript colleges read ends with junior year: an A in Algebra 2 reads better than a C in Pre-Calculus.

A checklist for the course-selection meeting

- [] Which track is my child on, and what does the 12th grade course list look like for that track?
- [] What grade did my child get in Algebra 2, and which units were weak (functions, logs, rational expressions)?
- [] Is AP Precalculus offered, and does it carry extra GPA weight?
- [] Is AP Statistics offered as an alternative, and does the intended major prefer it?
- [] When is the SAT, and when does the school's SAT prep start?
- [] Can the choice be changed in the first three weeks of the year?

From [the](https://sciencewithshobha.com/blog/what-math-do-you-take-in-11th-grade-algebra-2-precalculus-statistics-and-how-to-choose/) [guide](https://sciencewithshobha.com/blog/what-math-do-you-take-in-11th-grade-algebra-2-precalculus-statistics-and-how-to-choose/) at sciencewithshobha.com/blog/what-math-do-you-take-in-11th-grade-algebra-2-precalculus-statistics-and-how-to-choose/