

Preparing Students for College Math



Math Summit
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Hawai'i P-20 Partnerships for Education strengthens the education-to-workforce pipeline.

State Policy Advocate



Key Communicator and Convener



Best Practices Program Developer



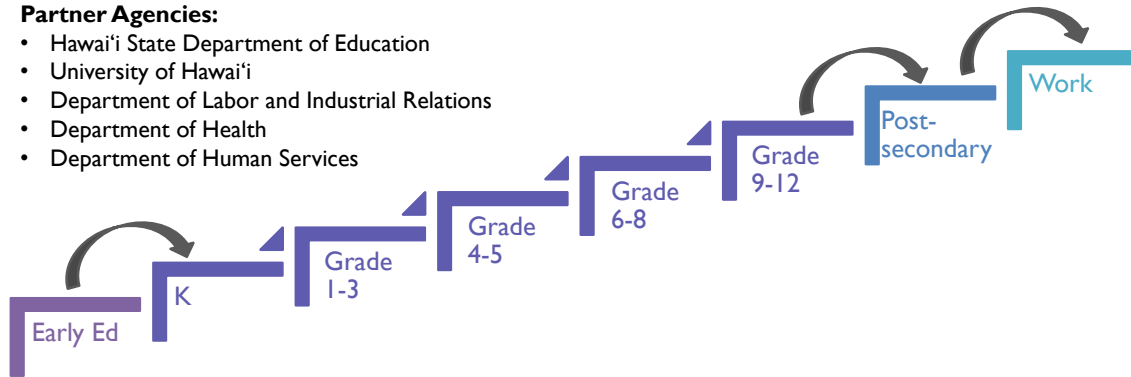
Interagency Data Coordinator



Hawai'i Data eXchange Partnership (DXP) is a statewide longitudinal data system

Partner Agencies:

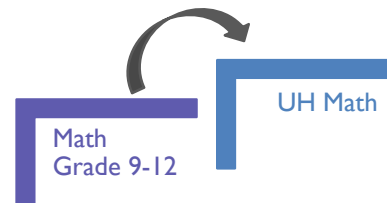
- Hawai'i State Department of Education
- University of Hawai'i
- Department of Labor and Industrial Relations
- Department of Health
- Department of Human Services



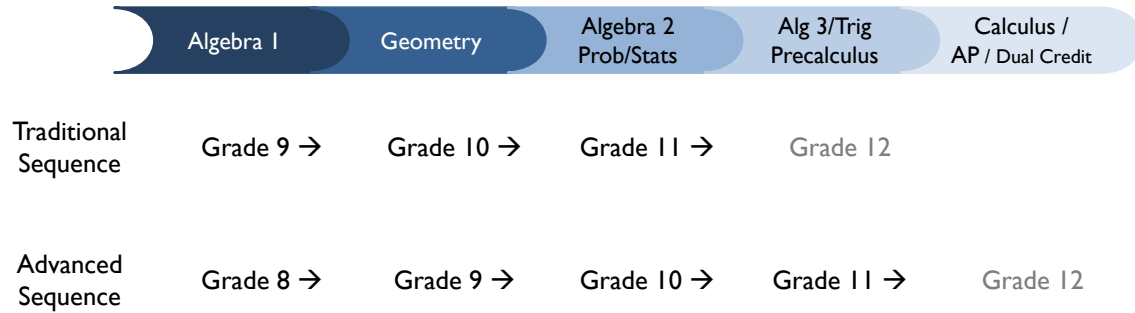
What do we know about students' high school math preparation and readiness for college-level math at UH?

DOE Graduates: Classes of 2014, 2015 & 2016

- Math enrollments by grade level
- Highest level of math completed
- 9th grade math enrollment
- Number of years math
- First UH math course level



High school math sequence



34% of graduates did not take math in the 12th grade

Graduation requirement: 3 credits math



Math course enrollments by grade level

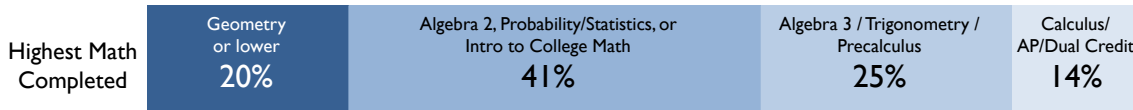
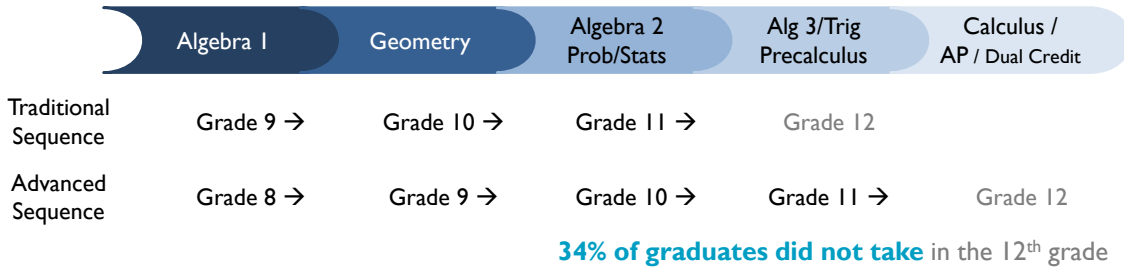
	Algebra I	Geometry	Algebra 2	Prob/Stats IntroColl	Alg 3/ Trig /Precalc	Calculus / AP / Dual	Other (workshop, directed study, MOW, transfer)
Grade 9	72%	22%	1%	<1%	<1%		24%
Grade 10	22%	49%	24%	<1%	1%	<1%	15%
Grade 11	6%	23%	40%	2%	19%	2%	12%
Grade 12	3%	7%	14%	9%	20%	13%	10%

34% of graduates did not take math in the 12th grade

Horizontal percentages may add up to over 100% if more than one math course taken during the year
 Percentages represent enrollment only; enrolled students may not have passed the course
 Class of 2014, 2015, & 2016 graduates



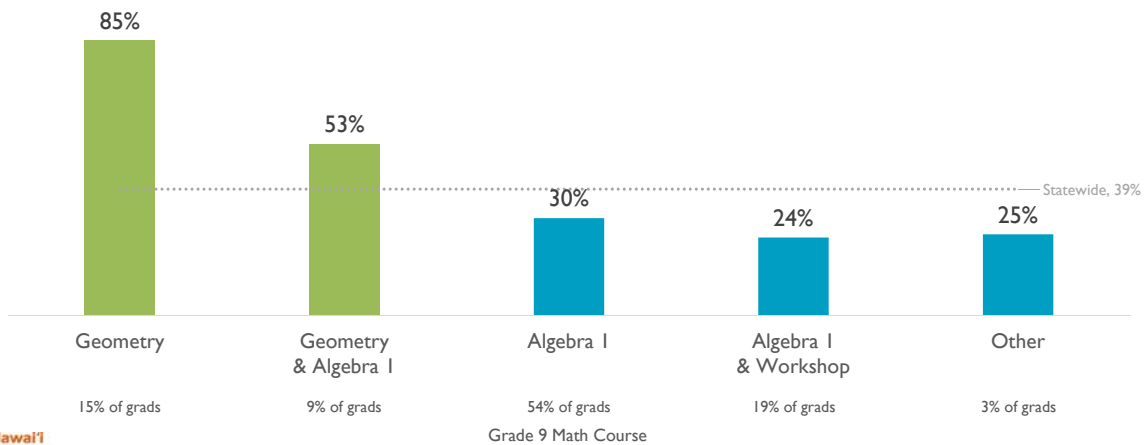
What is the highest level of math graduates complete?



Class of 2014, 2015, & 2016 graduates with math course records



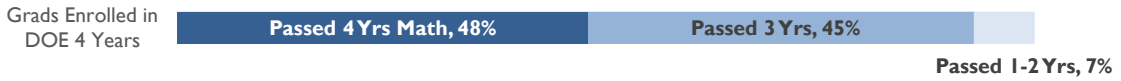
Graduates who took **Geometry in the 9th grade** were more likely to complete **Algebra 3 or higher**



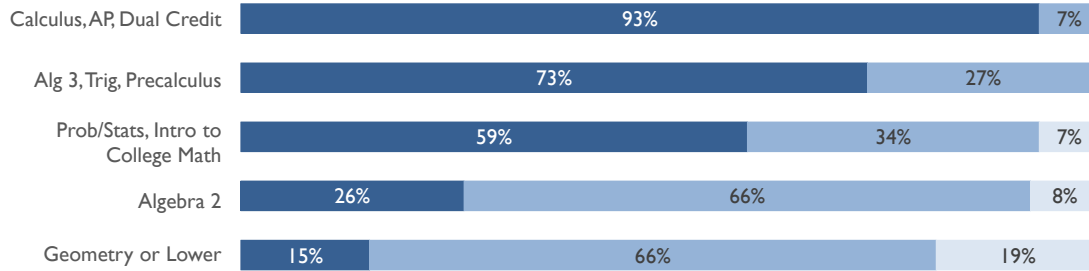
Class of 2014, 2015, & 2016 graduates with 9th grade math course records



How many years of math do students complete?



Highest Math Completed

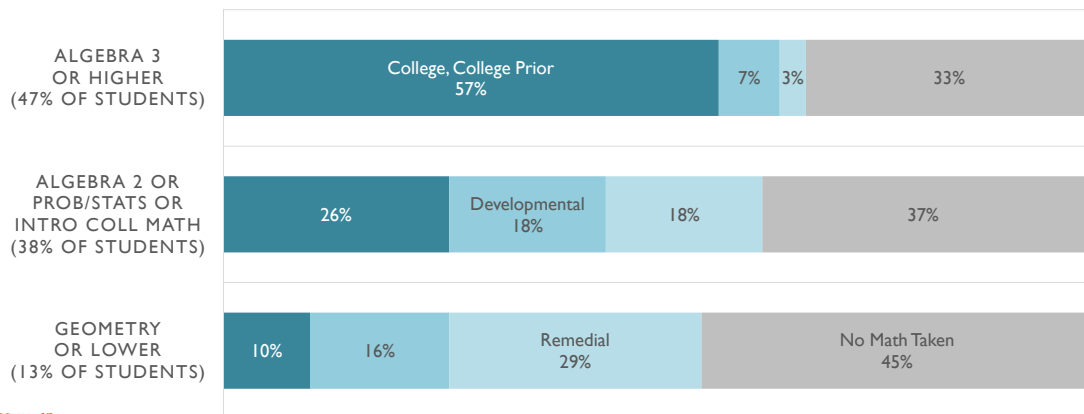


Class of 2014, 2015, & 2016 graduates with course records in the 4 years ending at graduation
 Graduates who enrolled in but did not earn a grade of D or better not counted as having "passed" math during the year



Graduates who passed Algebra 3 or higher were more likely to immediately enroll in a college-level math course at UH

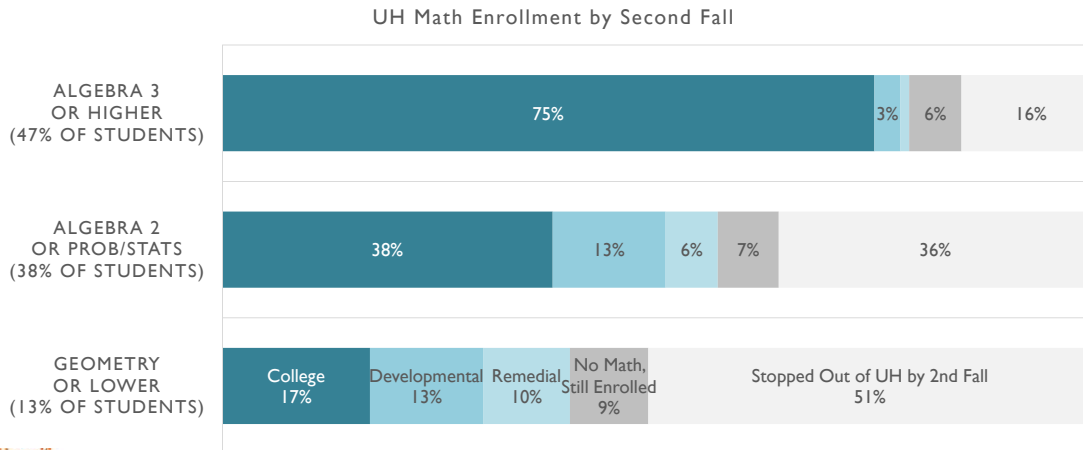
UH First Fall Math Enrollment



Class of 2014, 2015, & 2016 graduates enrolled at UH first fall; first fall UH math enrollment



How many graduates reached college-level math by the 2nd Fall?



Class of 2014 & 2015 graduates enrolled at UH 1st Fall; math enrollment by 2nd Fall after graduation



What best prepares students to make a successful transition to college-level math?

Students are better prepared if:

- They take 4 years of math in high school
- They complete advanced math (Algebra 3 or higher)
 - Students who are ready for Geometry in 9th grade are more likely to complete advanced math

