

Gilroy Unified School District

Proposal to Change Math Pathway

23

April

2026

MATHEMATICS FRAMEWORK for California Public Schools

Kindergarten Through Grade Twelve



Adopted by the California State Board
of Education November 2023

Published by the California Department
of Education Sacramento, 2024

In order to...

...make sense of the
world (*understand and
explain*) DI 1

...predict what could
happen (*predict*) DI 2

...impact the future
(*affect*) DI 3

Students will...

...make sense of
problems and persevere
in solving them SMP 1

...reason abstractly and
quantitatively SMP 2

...construct viable arguments
and critique the reasoning
of others SMP 3

...model with
mathematics SMP 4

...use appropriate tools
strategically SMP 5

...attend to precision SMP 6

...look for and make use of
structure SMP 7

...look for and express
regularity in repeated reasoning
SMP 8

While...

...reasoning
with data CC 1

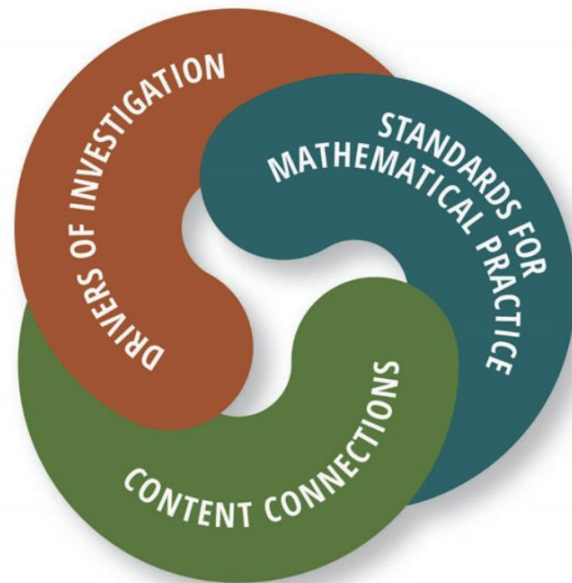
...exploring
changing
quantities CC 2

...taking wholes
apart, Putting
parts together
CC 3

...discovering
shape and
space CC 4

Why

How



What

California Math Framework: Then (2013) & Now (2023)

SIMILARITIES



Both frameworks support implementation of the California Common Core State Standards for Mathematics.

Both frameworks encourage rigorous activities that promote conceptual understanding while building on “Big Ideas” across grade spans.

Local districts still have autonomy to adapt pathways, sequencing, and curriculum to meet their students’ needs.

California Math Framework: Then (2013) & Now (2023)

DIFFERENCES



The 2023 Framework places a strong emphasis on equity—ensuring **all** students are viewed as capable of engaging deeply with mathematics.

The 2023 Framework introduces Drivers of Investigation (DIs)—the WHY behind learning. Content Connections (CCs) are the WHAT and HOW.

The 2023 Framework clearly outlines two high school pathways—traditional & integrated. Algebra I remains an option for 8th grade students.

GUSD's Math Pathway Change

Year	Grade 9	Grade 10	Grade 11
2013 New Framework Released	Algebra 1 / (H)	Geometry / (H)	Algebra 2 / (H)
2014	Algebra 1 / (H)	Geometry / (H)	Algebra 2 / (H)
2015	Algebra 1 / (H)	Geometry / (H)	Algebra 2 / (H)
2016	Math 1	Geometry / (H)	Algebra 2 / (H)
2017	Math 1 / 1+	Math 2	Algebra 2 / (H)
2018	Math 1 / 1+	Math 2 / 2+	Math 3
2019	Math 1 / 1+	Math 2 / 2+	Math 3 / 3+
2020	Math 1 / 1+	Math 2 / 2+	Math 3 / 3+
2021	Math 1 / 1+	Math 2 / 2+	Math 3 / 3+
2022	Math 1 / 1+	Math 2 / 2+	Math 3 / 3+
2023 New Framework Released	Math 1 / 1+	Math 2 / 2+	Math 3 / 3+

TRADITIONAL

Algebra 1	Geometry	Algebra 2
S1	G1	A5
A1	G2	A6
S2	G3	A7
F1	G4	A8
A2	G5	S3
A3	G6	S4
A4		

INTEGRATED

Math 1	Math 2	Math 3
S1	S3	A6
S2	A3	A7
A1	A4	G6
F1	A5	A8
A2	G3	S4
G1	G4	
G2	G5	

Controversy with Math Pathways



Figure 8.13: Big Ideas Map for Mathematics I

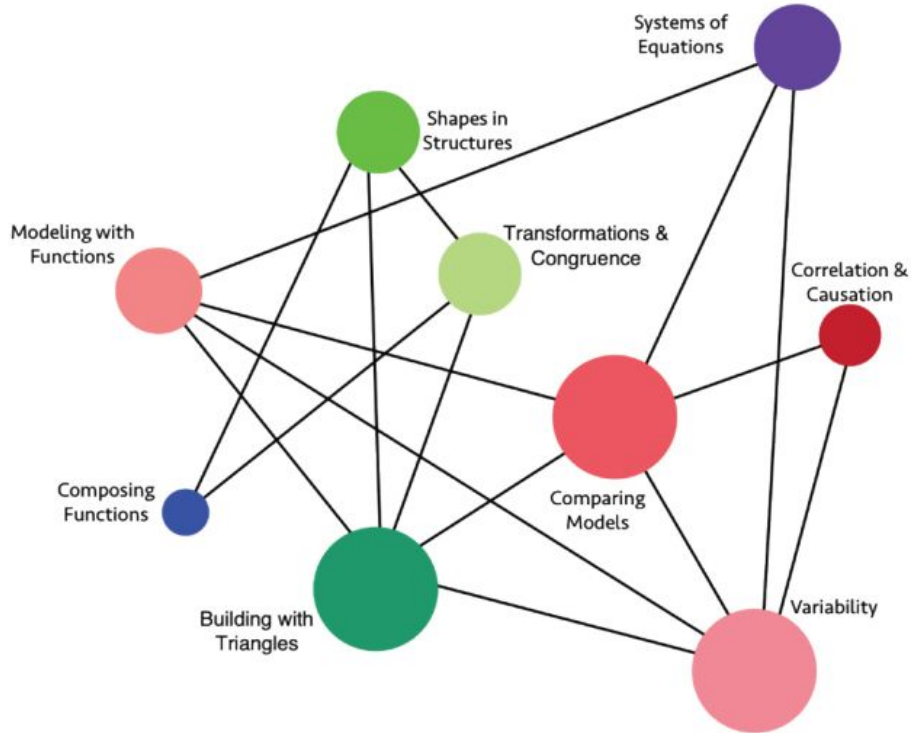


Figure 8.16: Big Ideas Map for Mathematics II

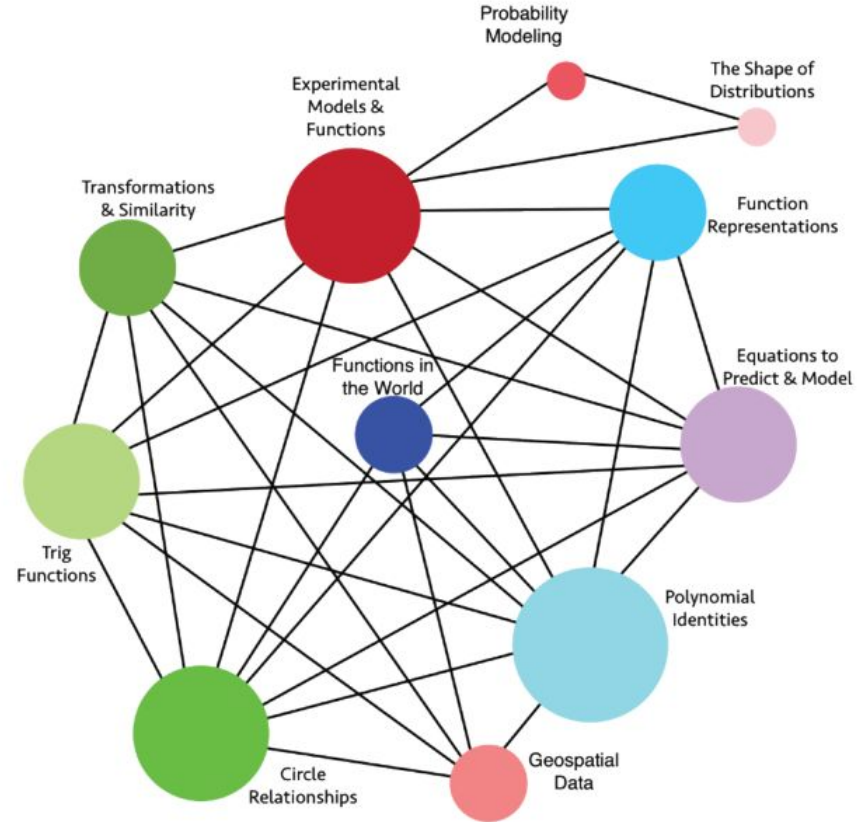


Figure 8.5: Big Ideas Map for Algebra I

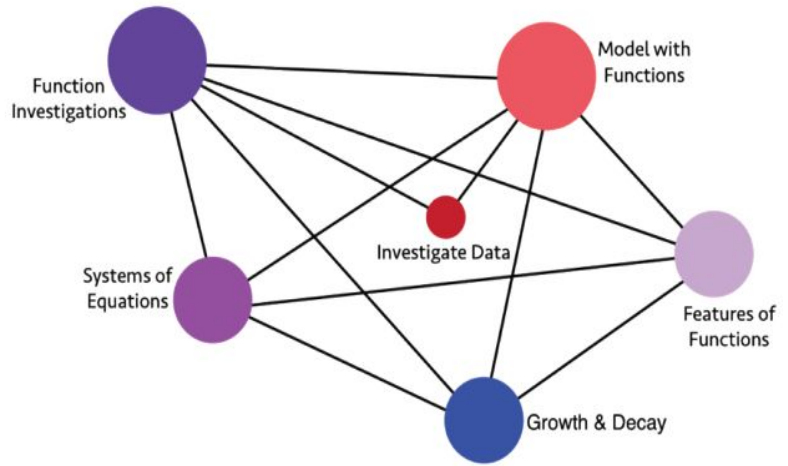


Figure 8.8: Big Ideas Map for Geometry

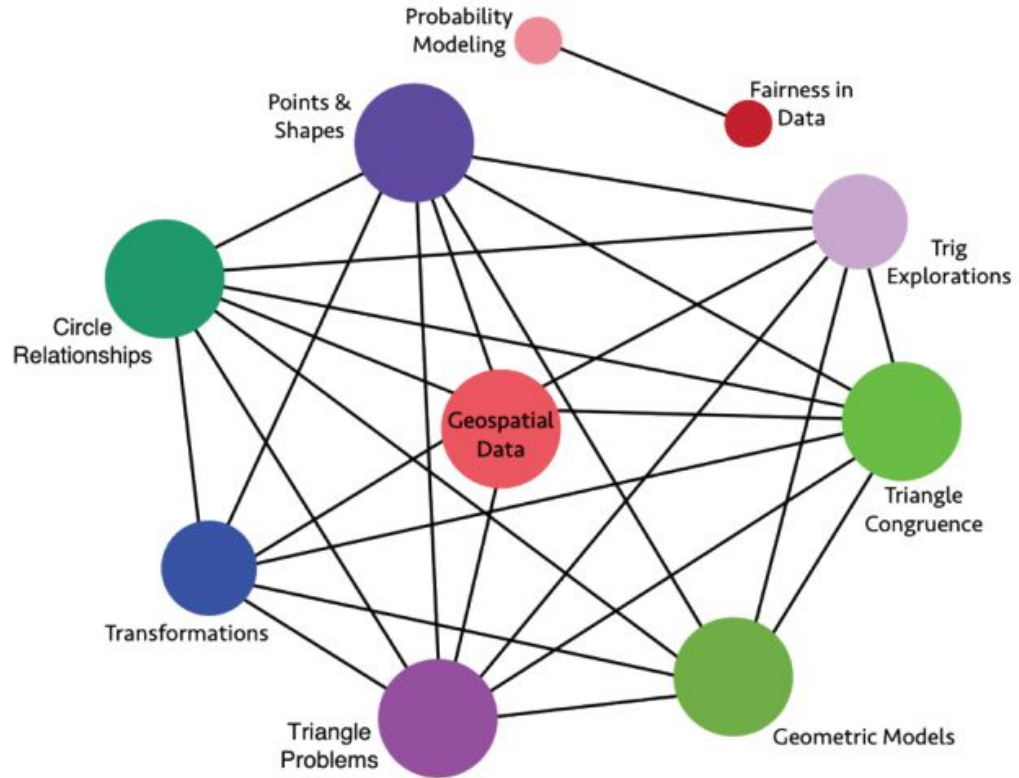


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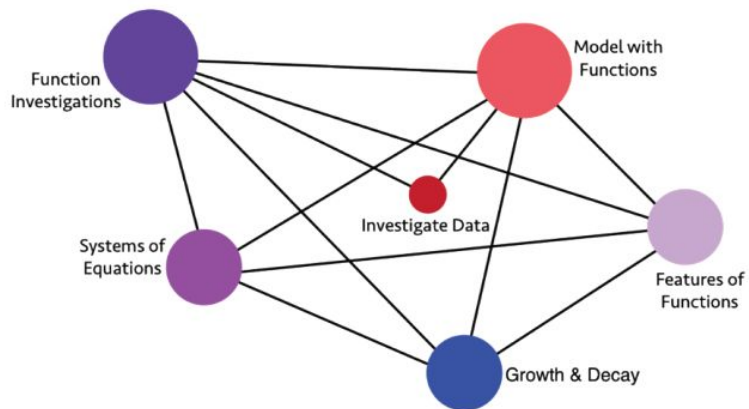


Figure 8.8: Big Ideas Map for Geometry

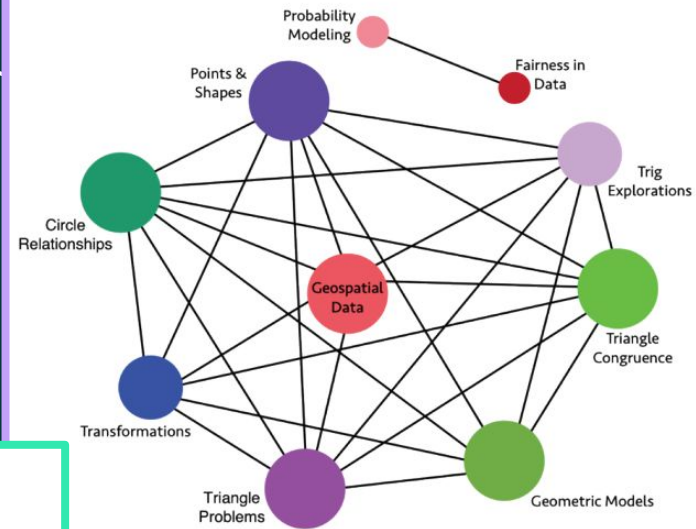


Figure 8.13: Big Ideas Map for Mathematics I

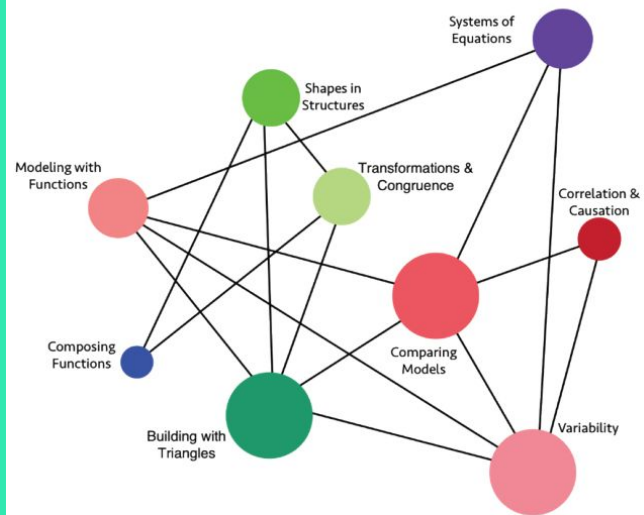
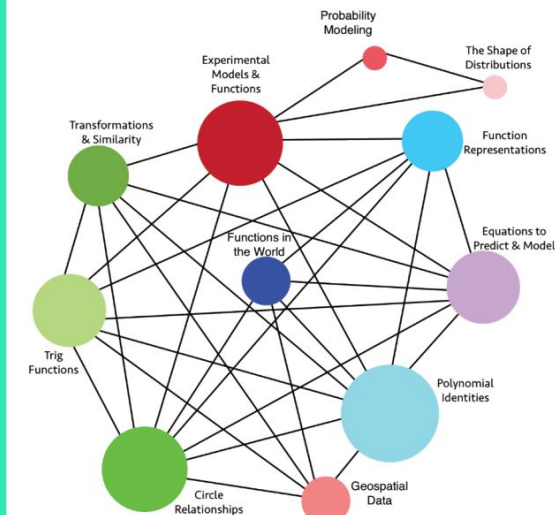


Figure 8.16: Big Ideas Map for Mathematics II



CAASPP Math Scores

Year	Grade 8 Not Met	Grade 11 Not Met	Grade 8 Met	Grade 11 Met	Grade 8 Exceeded	Grade 11 Exceeded
2015*	34%	51%	20%	16%	21%	8%
2016*	32%	46%	19%	18%	22%	10%
2017	34%	43%	18%	20%	25%	12%
2018	37%	46%	17%	19%	24%	13%
2019	44%	48%	14%	17%	23%	13%
2022	50%	54%	13%	14%	15%	12%
2023	50%	54%	14%	13%	13%	11%
2024	47%	52%	13%	17%	20%	11%
2025	49%	56%	13%	14%	19%	12%

Existing Math Pathway: Integrated Mathematics (IM)

Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Math 6 →	Math 7 →	Math 8 →	Math 1 →	Math 2 →	Math 3 →	AP Precalc or Statistics or Calculus
Math 6 Acc →	Math 7 Acc →	Math 8 Acc →	Math 1+ (Math 1A/B & Math 2A) →	Math 2+ (Math 2B & Math 3A/3B) →	AP Precalc / Math 3+ (Precalc) →	



Alternative Math Pathway: Algebra I–Geometry–Algebra II (AGA)

Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Math 6 →	Math 7 →	Math 8 →	Algebra I →	Geometry →	Algebra II →	(AP) Precalc or Statistics or Calculus
Math 6 Acc →	Math 7 Acc →	Math 8 Acc →	Geometry →	Algebra II →	(AP) Precalc →	

Benefits of Maintaining IM

Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Math 6 →	Math 7 →	Math 8 →	Math 1 →	Math 2 →	Math 3 →	AP Precalc or Statistics or Calculus
Math 6 Acc →	Math 7 Acc →	Math 8 Acc →	Math 1+ (Math 1A/B & Math 2A) →	Math 2+ (Math 2B & Math 3A/3B) →	AP Precalc / Math 3+ (Precalc) →	

Students who struggle with a unit do not need to suffer a whole school year. Allows different strengths to shine.

Quadratics taught at the end of Math 2 links nicely with polynomial functions in first semester MATH 3

All Curriculum Maps are already made for Math 1,2,3

Struggling students in Math 1 can master linear functions and algebra their first year before tackling quadratics the second year in Math 2

Students develop deeper conceptual understanding

Spiral/
review
built in

Students have more exposure to essential standards

Not all students need to take college level Calculus. Depends on their goals. Keeps basic skills current.

Any student is able to move into math plus route and isn't tracked.

Students see the interconnectedness of domains more clearly

Drawbacks of Maintaining IM

Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Math 6 →	Math 7 →	Math 8 →	Math 1 →	Math 2 →	Math 3 →	AP Precalc or Statistics or Calculus
Math 6 Acc →	Math 7 Acc →	Math 8 Acc →	Math 1+ (Math 1A/B & Math 2A) →	Math 2+ (Math 2B & Math 3A/3B) →	AP Precalc / Math 3+ (Precalc) →	

This requires teachers to maintain data on individual students on each unit.

Students are not getting much depth in the topics, so each year we are fully reteaching many students instead of just reviewing

The major difference between students levels in each class. Not all math 1 students are the same level.

Difficult to find curriculum that isn't just shuffled AGA curriculum. (This leads to students being expect to have skills they haven't been taught yet - and aren't planned to be taught for several modules/units/etc.)

Covers more variety of topics in a school year, spending less time on each than in traditional

Math 1+ and Math 2+ are too faced pace. Students go into it thinking they are "good" at math, but they don't thrive with the pace.

It is very difficult for students to switch between accelerated (Math 1+ or 2+) and grade level. Students are trying to skip Math 3. Or they fail a semester in Math 2+ and take math 2 in summer school. Transfers have a hard time with placement.

Students are not passing Math I and thus have to transfer or are just passing not learning to graduate

Spiralling makes sense conceptually, but the students say they have never seen something, that they were taught before. So we have to reteach topics over and over every year.

The students in middle school don't accelerate to anything.

The rate of exposure and depth

Unclear for which content the students are learning in each class.

Retention is always a problem with students and lacking procedural skills for higher math.

Students may be lacking procedural skills that become important in college level calculus courses

Benefits of Moving to AGA

Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Math 6 →	Math 7 →	Math 8 →	Algebra I →	Geometry →	Algebra II →	(AP) Precalc or Statistics or Calculus
Math 6 Acc →	Math 7 Acc →	Math 8 Acc →	Geometry →	Algebra II →	Precalc →	

More choice

Depth is possible

Easier/more options for remediation / credit recovery - especially for the honors students

Aligns with other schools/colleges so if they didn't take MS accelerated can take course through gav, take two at a time, etc.

AGA has a clear path way on what is being taught

Students can take algebra I and geometry concurrently for advancement.

Opens the possibility of pre-algebra in high school for those who didn't pass in middle school.

Don't spend time teaching the basics, dive deeper into the topics.

Can move up when ready

Students can get a deeper level of understanding of concepts so that they can apply that understanding to new skills/concepts

offers a clear, focused progression on one math domain at a time, reducing cognitive load and language demands

We have to make new curriculum maps and tests anyway next year for new books.

Students who fail algebra 1 freshman year take geometry and algebra 1 currently their second year

Benefits English language learners and high needs students.

Takes the needs of the students in mind.

Easier for teachers with certain subject expertise.

The current suggestion for course progression for AGA is simpler.

Can the progression of IM courses be modified to be simpler progression

More aligned with the college system.

Students get more practice on procedural skills necessary for higher level college course

Drawbacks of Moving to AGA

Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Math 6 →	Math 7 →	Math 8 →	Algebra I →	Geometry →	Algebra II →	(AP) Precalc or Statistics or Calculus
Math 6 Acc →	Math 7 Acc →	Math 8 Acc →	Geometry →	Algebra II →	Precalc →	

Students who take pre-algebra, then algebra will have two years without geometry content unless geometry is covered in pre-algebra

State testing...which types of math problems align with AGA? More beneficial?

This is still only preparing for Calculus. Still no trade school options, etc.

Lack of connection by students of each course

Subjects are not connected enough. Not like the real world.

We don't offer SS to advance if we did then MS courses would not affect the majority of kids

Student who do not take accelerated in MS will not have the opportunity to take AP Calc

May be difficult to switch tracks to take calculus in the middle of H.S.

Tracking affects low socioeconomic students more in a negative way.

The students are tracked and it would be difficult for a student to go into another pathway

A lot of overhaul work that may lead to the same results as integrated

Need to replan/make new curriculum maps, learn new curriculum

Transitions and strong foundation in math concepts

Connecting domains of mathematics takes deliberate effort and knowledge of teacher

High School Teachers Explored AGA Pathway through Math Pilot Adoption

10/14 - 1/13: Publisher A

6 weeks of IM 1 / IM 2 / IM 3

6 weeks of Alg 1 / Geom / Alg 2

1/13 - 4/16: Publisher B

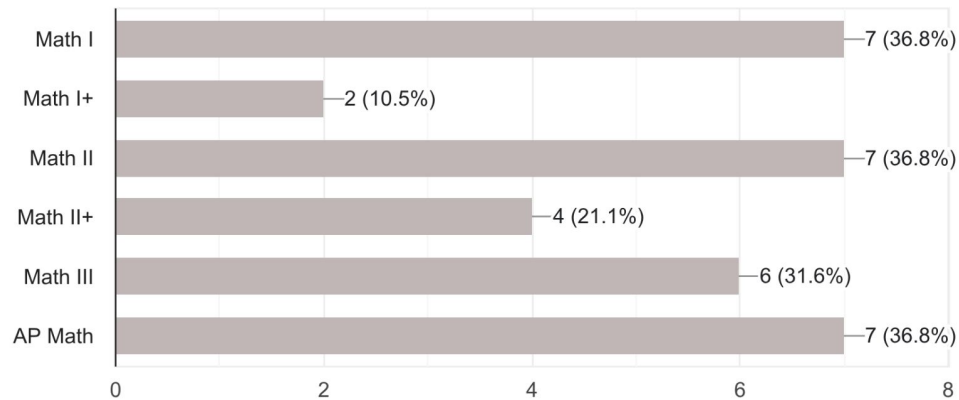
6 weeks of IM 1 / IM 2 / IM 3

6 weeks of Alg 1 / Geom / Alg 2

High School Math Teacher Survey Results

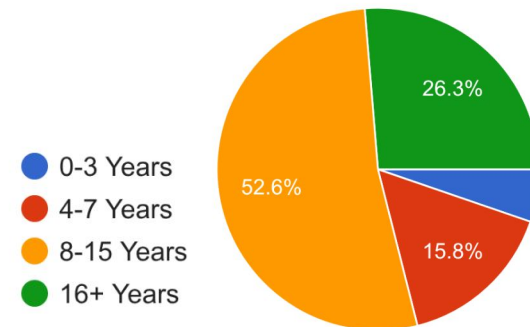
Select ALL of the courses you CURRENTLY teach.

19 responses



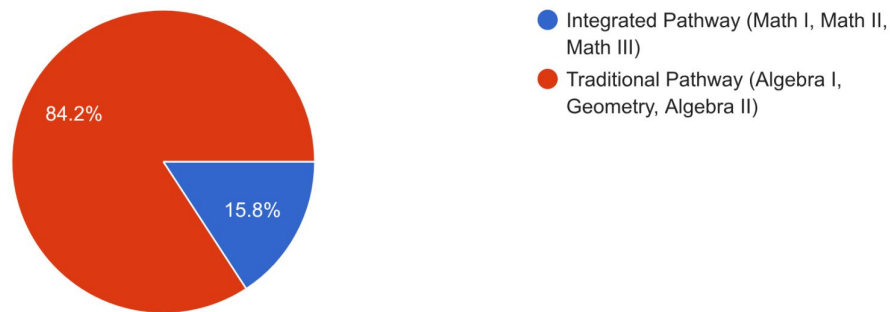
Years of Experience Teaching Mathematics

19 responses



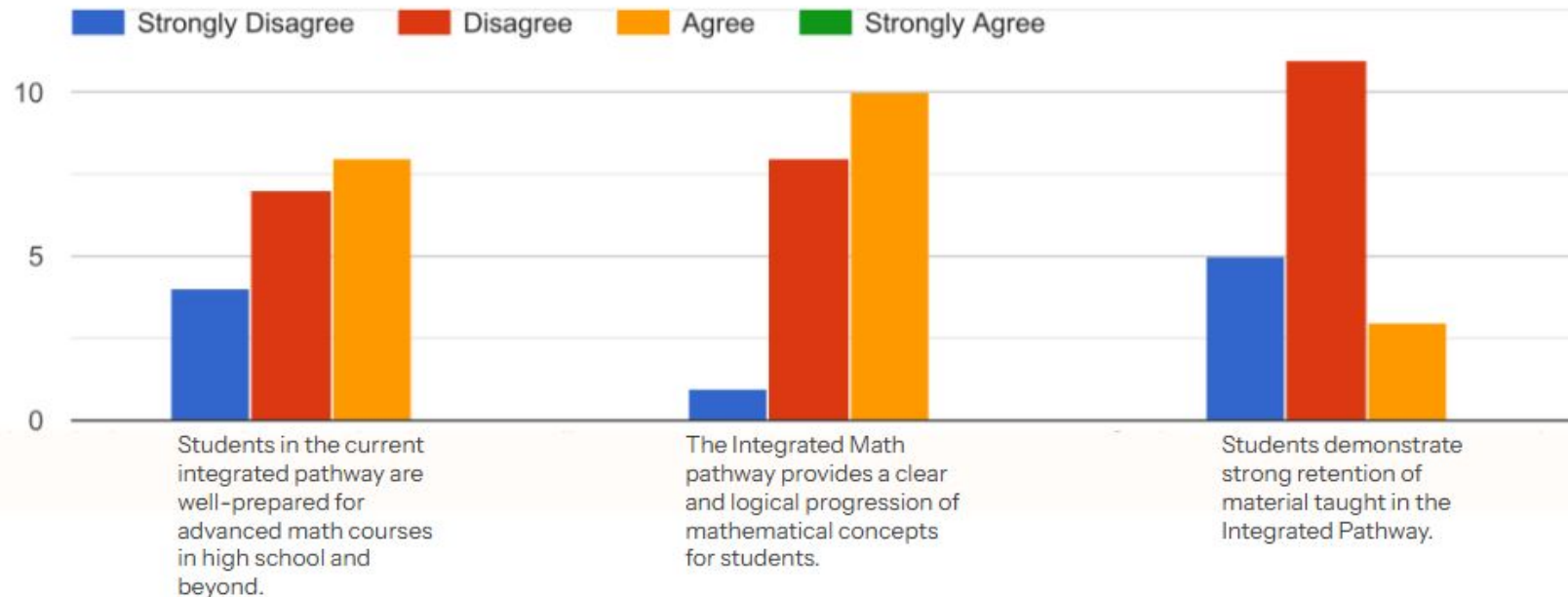
Overall, which pathway do you believe is superior for the majority of high school students?

19 responses



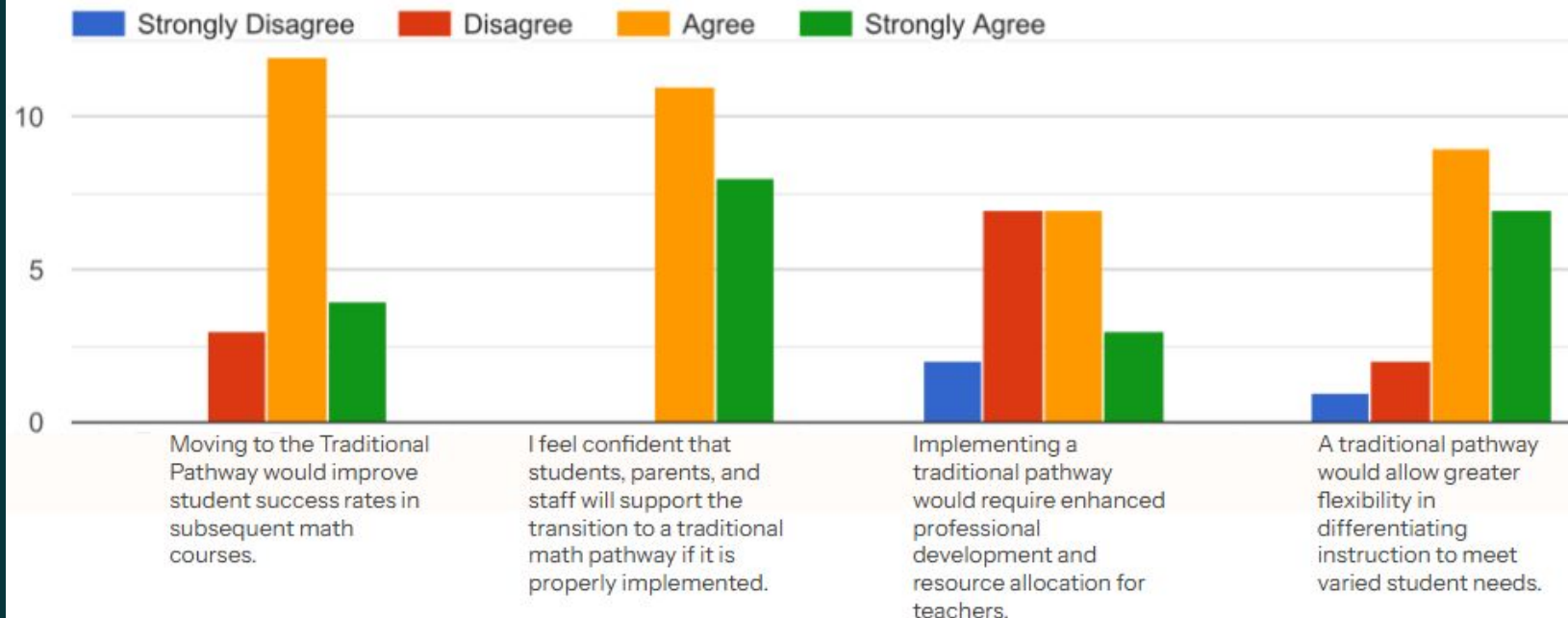
High School Math Teacher Survey Results

Please rate your agreement with the following statements regarding the CURRENT Integrated Math Pathway (Math I, Math II, Math III).



High School Math Teacher Survey Results

Please rate your agreement with the following statements regarding a potential move to the TRADITIONAL Math Pathway (Algebra I, Geometry, Algebra II).



Requested Action:

Board approval is requested to transition back to the traditional math pathway (following Algebra 1, Geometry, Algebra 2) through a year-by-year approach

Year	Grade 9	Grade 10	Grade 11
2023-24 <small>New Framework Released</small>	Math 1 / 1+	Math 2 / 2+	Math 3 / 3+
2024-25	Math 1 / 1+	Math 2 / 2+	Math 3 / 3+
2025-26 <small>Math Textbook Pilot</small>	Math 1 / 1+	Math 2 / 2+	Math 3 / 3+
2026-27	Algebra 1	Math 2 / 2+	Math 3 / 3+
2027-28	Algebra 1	Geometry	Math 3 / 3+
2028-29	Algebra 1	Geometry	Algebra 2
2029-30	Algebra 1	Geometry	Algebra 2
2030-31	Algebra 1	Geometry	Algebra 2



Questions?