



Curriculum Review Update K-12 Math Review

**April 20, 2026
School Board Meeting**

Presented By

Curriculum, Instruction & Assessment Team



Background

2021 - 2022: Year 0 (Reviewing standard changes as published)

2022 - 2023: Year 1 Curriculum Review (Self-Study)

2023 - 2024: Year 2 Curriculum Review (Resource Review)

2024 - Fall 2027: Phased implementation, determined by District 197 review team

2027 - 2028: Full Implementation of 2021 K-12 MN Mathematics standards

K-4 Focus for 2025-2026

Implementation with cohort of teachers in preparation for full implementation Fall 2026.

MS/HS Focus for 2025-2026

Completing resource review process, updating math pathways and continuing to develop common instructional and assessment approaches.









Elementary Partial Implementation 25-26

- **44** K-4 teachers participating from across all 5 sites (Over half of k-4 classrooms)
- Co-created **scope and sequence**
- Trial digital platforms: **MH+ digital assessments & Aleks adaptive tool**









Teacher Feedback: Implementation Progression

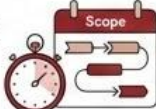



September: Early Implementation Focus

-  Teachers learning new lesson structures and instructional routines
-  Navigating a large number of new instructional resources
-  Adjusting to new pacing expectations
-  Focus on understanding how to use the curriculum
-  Limited use of formative assessment to guide instruction
-  Students adjusting to new expectations for discourse and problem solving

January: Instructional Progress Observed

- Teachers implementing lesson routines with increased consistency and confidence 
- Using key components strategically to support student understanding 
- Making intentional pacing adjustments to support conceptual learning 
- Focus on adapting instruction to better meet student needs 
- Exit tickets regularly informing small-group instruction and reteaching 
- Increased student engagement, participation, and mathematical reasoning 

Teacher Feedback: Areas of Ongoing Focus

Teacher Concern	Adjustments and Considerations
Pacing 	Continuing to refine the scope and sequence to support deeper conceptual learning across grades K–4
Reading Demands 	Adjusting lesson structures, strengthening vocabulary supports, and expanding use of digital tools to increase access
Differentiation 	Prioritizing strong whole-group lesson implementation first, with targeted differentiation as a continued professional learning focus
Digital Tools (ALEKS) 	Additional training planned for the 2026–27 school year to strengthen use of digital assessments and student data



Elementary Next Steps



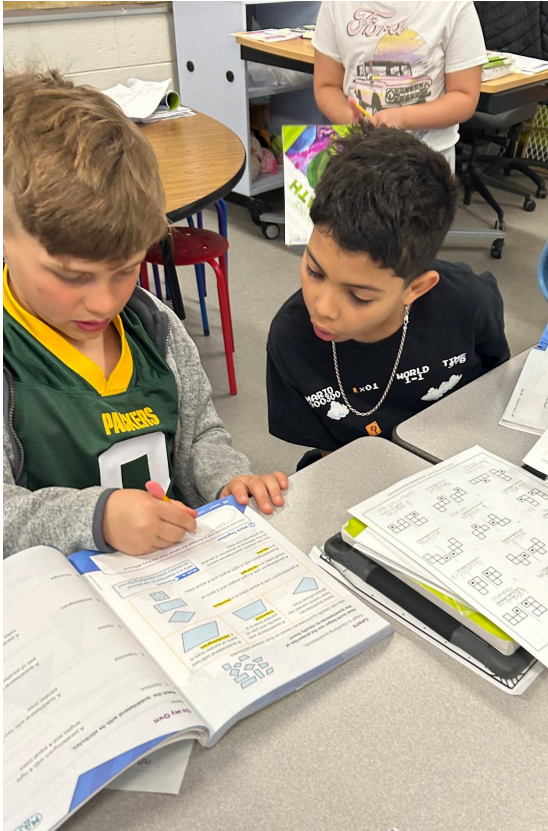
Training Academy - Summer 2026 & school year

- Develop common **unit assessments** aligned to standards

Across K-4

- **FULL K-4** implementation
- Continue and extend Math PD with Reveal to focus on: **Student Discourse, Promoting a Positive Math classroom, Incorporating Manipulative, Digital Assessments, tools, and Student Data.**

Elementary Next Steps



Beyond 2026-2027

- PD on **Small Group Instruction and Differentiation**
- Increasing **Language Supports** for Students
- Incorporate **MH+ data** into CT work
- Aligned and refine **grading rubrics**



Secondary Review Process 2025-2026

Summer Training Academy

8	JUL 2025, TUE	● 8:30am – 3pm	MS Math Training Academy
15	JUL 2025, TUE	● 8:30am – 3pm	MS Math Training Academy
22	JUL 2025, TUE	○ 8:30am – 3pm	HS Math Training Academy
		● 8:30am – 3pm	HS Math Training Academy
23	JUL 2025, WED	○ 8:30am – 3pm	HS Math Training Academy
		● 8:30am – 3pm	HS Math Training Academy

MS Department Meetings

Date	Time
August 28	7:30 - 8:30AM
Oct 6	12:00 - 3:30PM
Oct 23	7:40 - 8:20AM
Nov 20	7:40 - 8:20AM
Dec 18	7:40 - 8:20AM
Jan 15	7:40 - 8:20AM
Feb 12	7:40 - 8:20AM
March 12	7:40 - 8:20AM
April 9	7:40 - 8:20AM
May 7	7:40 - 8:20AM

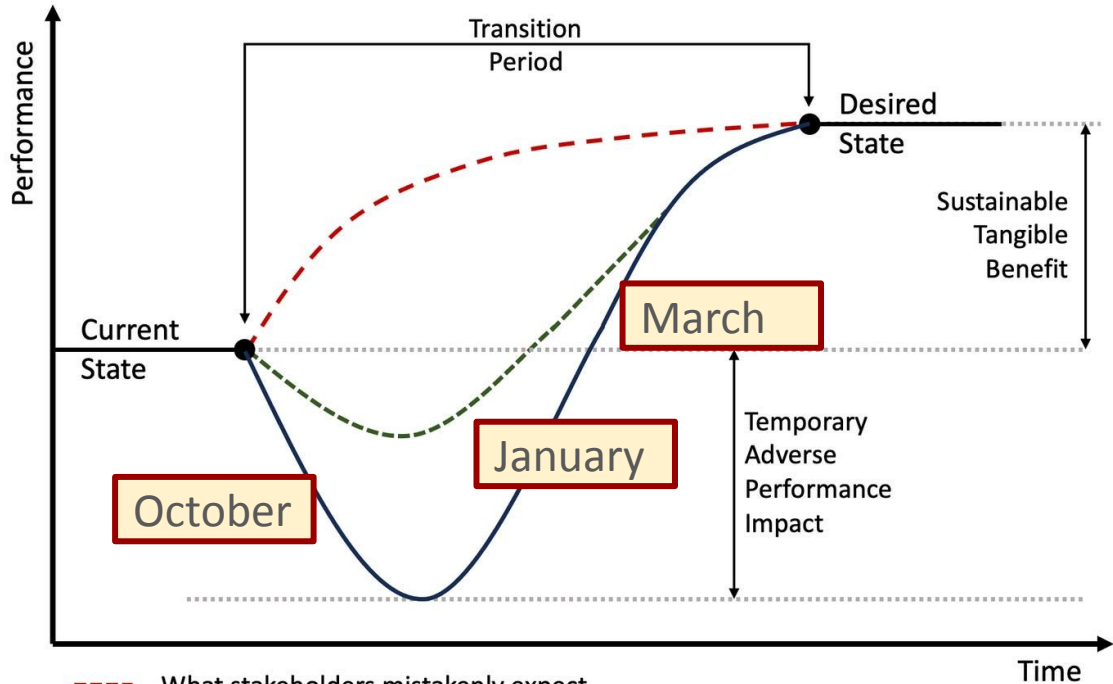
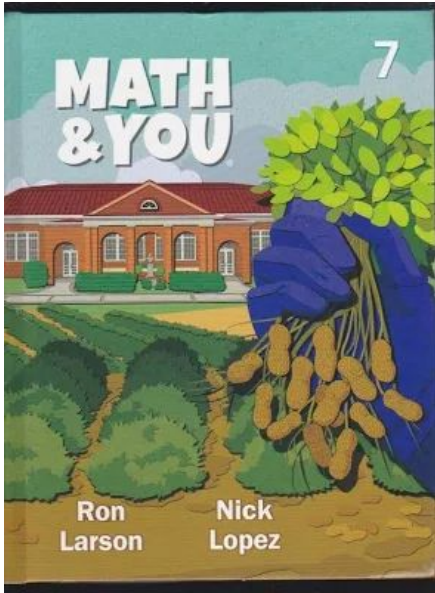
Gr 8/9 Articulation Meeting

School Year Support

29	OCT 2025, WED	● 8am – 3:30pm	5-8 Math Review
14	JAN 2026, WED	● 8am – 3:30pm	5-8 M
11	MAR 2026, WED	● 8am – 3:30pm	5-8 M

24	SEP 2025, WED	● 7:45am – 3:15pm	9-12 Math Review
12	NOV 2025, WED	● 7:45am – 3:15pm	9-12 Math Review
4	FEB 2026, WED	● 7:45am – 3:15pm	9-12 Math Review
7	APR 2026, TUE	● 7:45am – 3:15pm	9-12 Math Review

Middle School Implementation

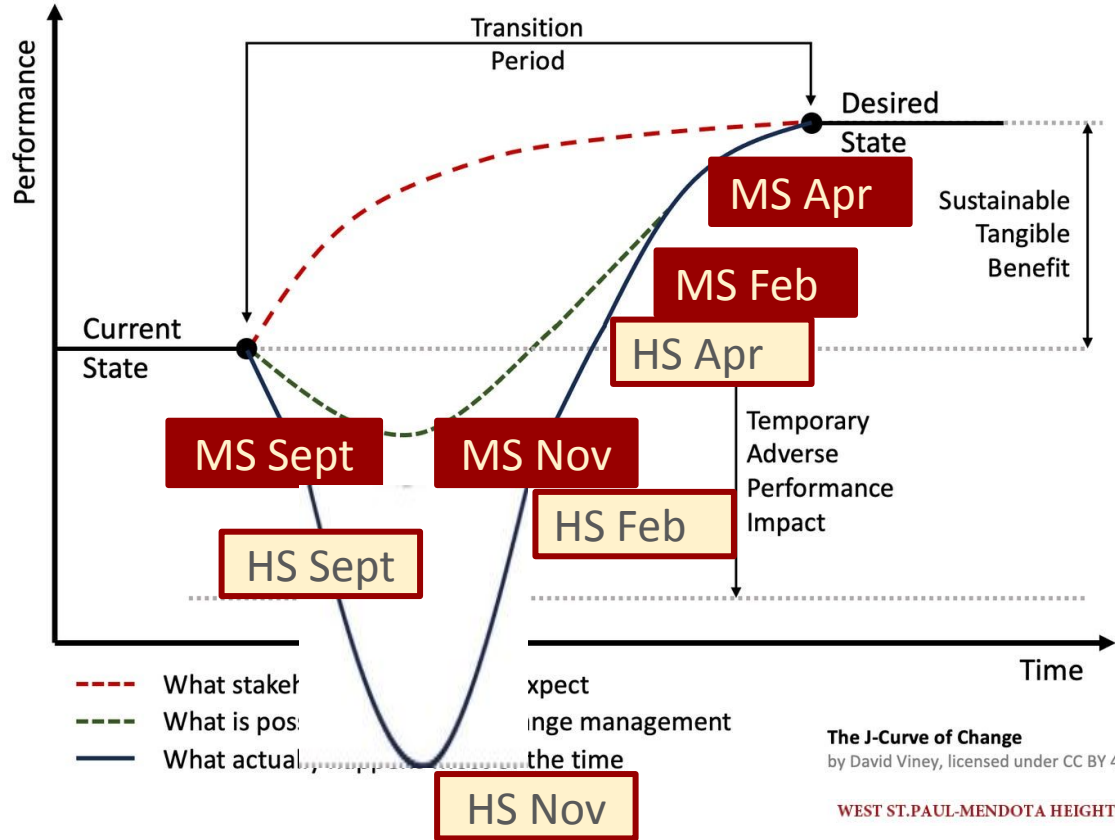
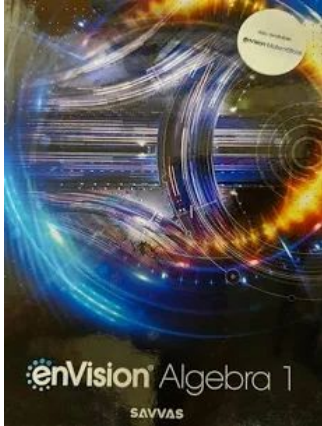


- What stakeholders mistakenly expect
- What is possible with sound change management
- What actually happens most of the time

The J-Curve of Change
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High School Implementation



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WEST ST. PAUL-MENDOTA HEIGHTS-EAGAN





High School Implementation

	Big Ideas (Gr 5-8)	IXL (Gr 5-8)	Savvas	Math Medic	Delta Math
Summer 2025	MS Planned Install		MS/HS Full focus		
September 2025	MS Started Install	MS Started Install	MS/HS Full focus	HS Early Innovator	HS Early Innovator
November 2025	MS Continue Install	MS Continue Install	MS Full HS Some	HS Started Install	HS Early Innovator
February 2025	MS Continue Install	MS Continue Install	MS Full focus	HS Continue Install	HS Started Install
April 2025	MS Full Install	MS Full Install	MS Full focus	Continue Install	Continued Install



Secondary Implementation

High School scenario to overcome: At the high school level, student engagement often drops when math feels like a series of disconnected procedures.

- Math Medic program uses the Experience First, Formalize Later (EFFL) model. Students start each lesson with a collaborative activity that requires low-floor, high-ceiling thinking. They explore the math before the teacher formalizes the definitions.
- Savvas, while also having what is called a 3-part-lesson (observe, analyze/develop, evaluate) structure, the 3-part-lesson itself is a step-by-step routine, and not as wide-open as EFFL structure.

Middle School reality: Middle school students are still developing the executive functioning skills needed for pure discovery. Savvas envisionmath provides the explicit scaffolding and guided Practice that younger learners need to build a stable foundation.



Secondary Implementation

Scenario to overcome: Need for a smooth workflow and efficient, useful, timely feedback

Delta Math is recognized at high school level for its feedback loop and infinite problem generation.

- **Immediate Feedback and Student Agency:** High school math concepts, like Logarithms or Trigonometry, require high-volume, repetitive practice to reach procedural fluency. Delta Math provides instant, step-by-step explanations for every wrong answer, allowing students to self-correct without waiting for a teacher.

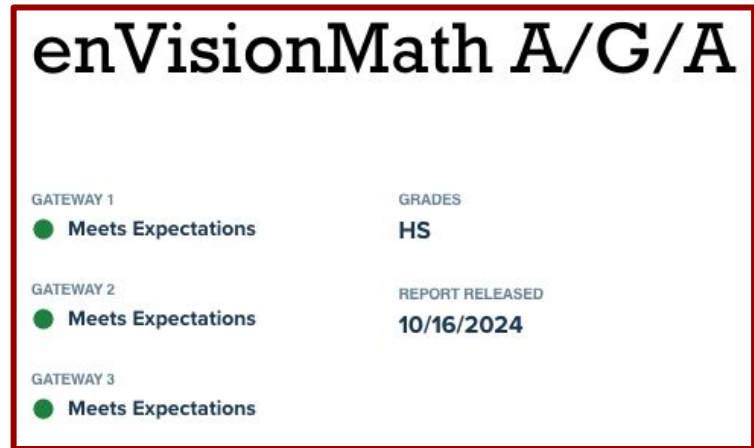
Middle School reality: The workflow for a student at the middle school level is different, if entirely because of the device they use (iPads instead of laptops). While the teachers are able to use the Realize digital platform (that envisionMath is on), they also use a variety of other digital tools that allow for editing and submission. Additionally, with having IXL, students already have the same immediate feedback that the high school students and staff need.



Secondary Implementation

Scenario to overcome: Why middle school will not match the high school resources.

- Standards are the focus - not the resources.
- By using *Savvas* in Intermediate Algebra and Pre-AP Geometry in the middle schools, and the Math Medic/Delta Math blend beginning in 9th grade, we create a clear transition. Students move from a teacher-led environment to a student-centered environment, mirroring the shift they will experience when moving from high school to college.















Secondary Implementation

Scenario to overcome: Why middle school will not match the high school resources.

- Standards are the focus - not the resources.
- Math Medic's Experience First, Formalize Later (EFFL) framework is a research-backed pedagogical model that prioritizes student inquiry and conceptual discovery.
- Students grapple with mathematical ideas using their own intuition before teachers introduce formal academic language and formulas, a process shown to improve long-term retention and productive struggle (Bjork & Bjork, 2011).
- This shift from passive consumption to active production builds deeper understanding and shifts mathematical authority to the students, fostering a more equitable classroom environment (Gresalfi & Cobb, 2006).
- Collaborative discourse further supports this learning by allowing students to refine their rough draft thinking through peer interaction, which has been linked to significant gains in standardized test proficiency and AP pass rates.



Revised Math Pathways - High School

Grade	Courses					
	General Options		*Single Acceleration Options		*Double Acceleration Options	
7			Advanced Math 7 <small>(not a high school level course)</small>		Intermediate Algebra	
8	Linear Algebra <small>(not a high school level course)</small>		Intermediate Algebra		Pre AP Geometry	
9	Intermediate Algebra		Geometry	PreAP Geom-etry	Algebra 2	PreAP Algebra 2 w/ Trigonometry
10	Geometry	PreAP Geometry	Algebra 2	PreAP Algebra 2 with Trigonometry	PreAP Algebra 2 with Trigonometry	AP® Pre Calculus 
11	Algebra 2	PreAP Algebra 2 with Trigonometry	Analysis OR * PreAP Algebra 2 with Trigonometry	AP® Pre Calculus 	AP® Pre Calculus 	AP® Calculus AB 
12	Analysis OR Math for Trades OR AP® Statistics OR CIS College Algebra 	AP® Pre Calculus OR AP® Statistics 	*AP® Pre Calculus OR AP® Statistics OR CIS College Algebra 	AP® Calculus AB OR AP® Statistics 	AP® Calculus AB OR AP® Statistics 	AP® Calculus BC OR AP® Statistics 
Elective: Intro to Computer Programming, AP® Computer Science						

What is the impetus? Standards Change

The new standards represent a significant shift, especially in upper middle school and high school.

The required level of rigor for concepts in Intermediate Algebra, Geometry, and Algebra 2 has increased substantially and there are additional standards.

Our goal is to align our pathways and placement processes to ensure students are fully prepared to meet the demands of these new, more rigorous standards, leading to better long-term outcomes.

What is the Standards Change in Intermediate?

Intermediate Algebra of PAST

Covered ALL linear algebra standards and non-linear standards

With NEW standards, Intermediate Algebra

Review key concepts from Linear in unit 1, non-linear and adding new probability and stats standards

Currently 8th graders in Intermediate Alg are experiencing this change and teachers are going slower than high school to address Linear Algebra concepts.

So What?

We want to provide a pathway that still allows students to access Intermediate Algebra in 8th grade but to do that we will start in 7th grade.

Advanced 7 Math course will cover all 7th-grade at a quicker pace (likely quarters 1 - 3) and then move into Linear Algebra content. This better prepares students for the jump to Intermediate Algebra in 8th grade, due to vast reduction in time to review in Int. Algebra.

What changes happening in Geometry and Algebra II

The rigor in Algebra II with Trig which prepares students for AP Precalculus, has been an on-going challenge and now there are more standards with increased rigor that need to be covered.

So, we are adding a second level of Geometry with a focus on questioning and application at DOK 2 and 3 and additional standards that are otherwise covered in Algebra 2. This will better prepare students for the rigor of future classes.

The middle school course next year will be named **PreAP Geometry**.

Math Pathways beginning in 2026-2027

Grade	Courses		
	General Options	*Single Acceleration Options	*Double Acceleration Options
5	Math 5	Math 5	Accelerated Math I
6	Math 6	Math 6	Accelerated Math II
7	Math 7	Advanced Math 7 (not a high school level course)	Intermediate Algebra
8	Linear Algebra (not a high school level course)	Intermediate Algebra	Pre AP Geometry
9	Intermediate Algebra	Geometry	Algebra 2
		PreAP Geometry	PreAP Algebra 2 w/ Trigonometry

Math Pathways Grades 5 - 12

School District 197

Calendar Careers Enroll Meals Family Hub Staff Hub Quicklinks **Questions + Concerns**

District Academics Resources Community Kindergarten News Schools Activities

Magnet Schools | Preschool | Elementary | Middle School Academics | High School | English Language Development | Gifted & Talented | Special Services | Testing & Achievement | Title I | Attendance Matters

Math Pathways

Students have multiple options for acceleration and support in math through their middle school and high school experience.

Support: An additional math support class is offered in Grades 5 - 9 for students that need it. Students are identified for these support classes based on their performance in their current/previous math class, standardized test scores and teacher input.











Acceleration and Challenge: Students with superior performance in math have options to accelerate their learning beginning as early as fifth grade. For specifics on how that process works, see the District's Single Subject Acceleration Process.

A second option for acceleration occurs in seventh grade. Rather than families or students opting into Advanced Math 7, placements will be based on multiple measures including student performance data and teacher input. If a family has a question about placement or would like to advocate for a different placement they should contact the associate principal at their child's school. See below for more information about Advanced Math 7.

Grade	General Options	*Single Acceleration Options	*Double Acceleration Options
5	Math 5	Math 5	Accelerated Math I
6	Math 6	Math 6	Accelerated Math II
7	Math 7	Advanced Math 7 (not a high school level course)	Intermediate Algebra
8	Linear Algebra (not a high school level course)	Intermediate Algebra	Pre AP Geometry
9	Intermediate Algebra	Geometry	PreAP Geometry
10	Geometry	PreAP Geometry	Algebra 2
11	Algebra 2	PreAP Algebra 2 with Trigonometry	Analysis OR *PreAP Algebra 2 with Trigonometry
12	Analysis OR Math for Trades OR AP® Statistics OR CIS College Algebra	AP® Pre Calculus OR AP® Statistics	*AP® Pre Calculus OR AP® Statistics OR CIS College Algebra

The table to the right shows the different pathway options from grade 5 - 12. [View the table in Spanish here.](#)

Frequently Asked Questions

Grade	Courses					
	General Options	*Single Acceleration Options	*Double Acceleration Options			
5	Math 5	Math 5	Accelerated Math I			
6	Math 6	Math 6	Accelerated Math II			
7	Math 7	Advanced Math 7 (not a high school level course)	Intermediate Algebra			
8	Linear Algebra (not a high school level course)	Intermediate Algebra	Pre AP Geometry			
9	Intermediate Algebra	Geometry	PreAP Geometry	Algebra 2	PreAP Algebra 2 w/ Trigonometry	
10	Geometry	PreAP Geometry	Algebra 2	PreAP Algebra 2 with Trigonometry	PreAP Algebra 2 with Trigonometry	AP® Pre Calculus 
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12	Analysis OR Math for Trades OR AP® Statistics OR CIS College Algebra 	AP® Pre Calculus OR AP® Statistics 	*AP® Pre Calculus OR AP® Statistics OR CIS College Algebra 	AP® Calculus AB OR AP® Statistics 	AP® Calculus AB OR AP® Statistics 	AP® Calculus BC OR AP® Statistics 

The Placement Process

Placement Data for Advanced Math 7: Placement into this course will be based on a comprehensive review of district data, including the winter FAST test results as well as teacher input.

Timeline: The placement process will formally begin after the winter screening to ensure the FAST test data is included.

Additional Testing Change: We will discontinue the 6th-grade acceleration test. Instead, we will only offer testing for acceleration to 5th-grade students moving into 6th grade.

Why? Students accelerated from Math 6 to Intermediate Algebra in grade 7, skip Math 7 AND Linear Algebra standards.

Communication with Families

Each student going into 7th will get a letter via Parent Square indicating their math placement.

The letter will be assuming agreement with the placement unless the family opts out.

If a family is not in agreement with the decision, and would like to have the student moved into an advanced math course in 7th or 8th grade, they will work with the site's administrative team to make that decision.



Four Way Equity Test

Does this help to provide opportunities for students who have historically been underserved, underrepresented, or disadvantaged by the current system?

Does this help to ensure equitable access for all?

Does this help to eliminate barriers based on gender, race/ethnicity, national origin, color, disability, age or other protected group?

Does this ensure the same rigorous standards for academic performance exist for all students?

Category/Role 3: Culturally Responsive						
Descriptor	Example	Observed				Notes
		Y	S	Y	N	
Student and teacher-facing materials support a wide representation of people, perspectives, and histories within the math images, names, lessons, activities, and assessments	Represent full, complex characters from marginalized groups so that students can have a more holistic understanding of themselves and others	EX	Y	S	N	
Materials support a strong home-school connection	Does it include homework/at-home practice? Does it include a parent letter? Family support	EX	Y	S	N	
Guidance is provided within the core materials on making real-life connections between academic content and the local neighborhood, culture, environment, and resources.	Is it authentic and engaging? Multiple points of view for students on their background/knowledge					
Teacher guidance is provided on practices that support the learning, development, and engagement of students from diverse backgrounds	EL support there a version of language available to support students from diverse backgrounds					

Grade	Courses			
	General Options	*Single Acceleration Options	*Double Acceleration Options	
7			Intermediate Algebra	
8	Linear Algebra (not a high school-level course)	Intermediate Algebra	Geometry	
9	Intermediate Algebra	Geometry	Algebra 2	Algebra 2 w/ Trigonometry
10	Geometry	Algebra 2	Algebra 2 with Trigonometry	AP Pre Calculus
11	Algebra 2	Algebra 2 with Trigonometry	Analysis OR *Algebra 2 with Trigonometry	AP Pre Calculus
			AP Pre Calculus	AP Calculus AB
			AP Calculus AB OR AP Statistics	AP Calculus AB OR AP Statistics
			AP Calculus BC OR AP Statistics	AP Calculus BC OR AP Statistics
			Programming, AP Computer Science	

16.2	10.9	13.0	38.5
14.4	10.4	7.0	33.8
14.6	9.5	11.0	33.8
13.0	8.8	9.0	31.3
16.8	11.4	13.0	39.3
16.9	12.0	13.0	40.8
15.57575758	10.65151515	66	Grand Total 5254

Standards/Rigor	Usability	Cultural Inclusivity	K-8 Total
Big Ideas 15.95238095	Big Ideas 11	Big Ideas 11.42857143	Big Ideas 38.8875
Everyday Math 17.25	Everyday Math 8.75	Everyday Math 8.5	Everyday Math 35.83333333
Illustrative 10.91666667	Illustrative 6.58333333	Illustrative 7.25	Illustrative 25
Into Math 15.875	Into Math 9.75	Into Math 9.25	Into Math 41.5
iReady 15.23809524	iReady 9.95238095	iReady 9.80952381	iReady 33.71428571
Reveal 15.85	Reveal 9.65	Reveal 9.25	Reveal 38
Grand Total 15.21428571	Grand Total 9.87142857	Grand Total 9.539612245	Grand Total 36.68253968

Grade 5-8	Rigor	Usability	Culturally Responsive	Total
Big Ideas	16.8	10.2	11.3	38.3
	10.7	5.9	7.0	23.6
	5.0	1.0	4.0	10.0

✦ **MINNESOTA TRIBAL NATIONS CONTEXTS:** Connect mathematical problem solving experiences and contributions to place, story, cultural practices, language and perspectives relevant to historical and contemporary Dakota and Anishinaabe communities. The four directions symbol (✦) represents Minnesota Tribal Nations Contexts.

Secondary Next Steps



MS - Installation in 2025-2026, further refinement in 2026-2027 within regularly structured department time.

MS/HS Math Pathways: Continue to monitor the changes in placement and process, and refine as needed.

HS Training Academy - Summer 2026 & school year

- Continue reviewing scope and sequence and alignment to 2022 math standards
- Continue participating in professional development related to resources
- Develop common unit assessments aligned to standards

