

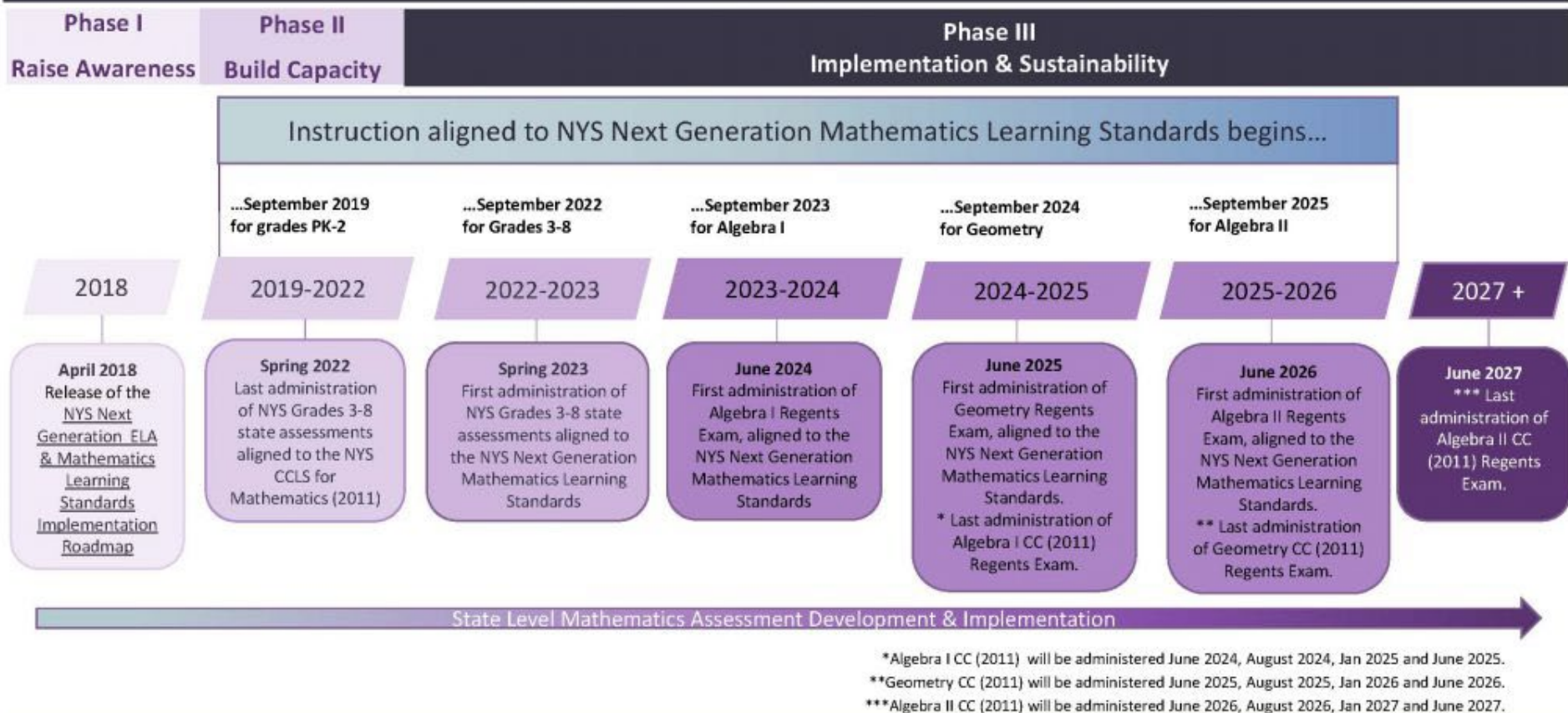
Board of Education Presentation

December 10, 2025

NYS Next Generation Standards

Revised March 2021

New York State Next Generation Mathematics Learning Standards Instruction and Assessment Implementation Timeline



NYS Mathematics Standards

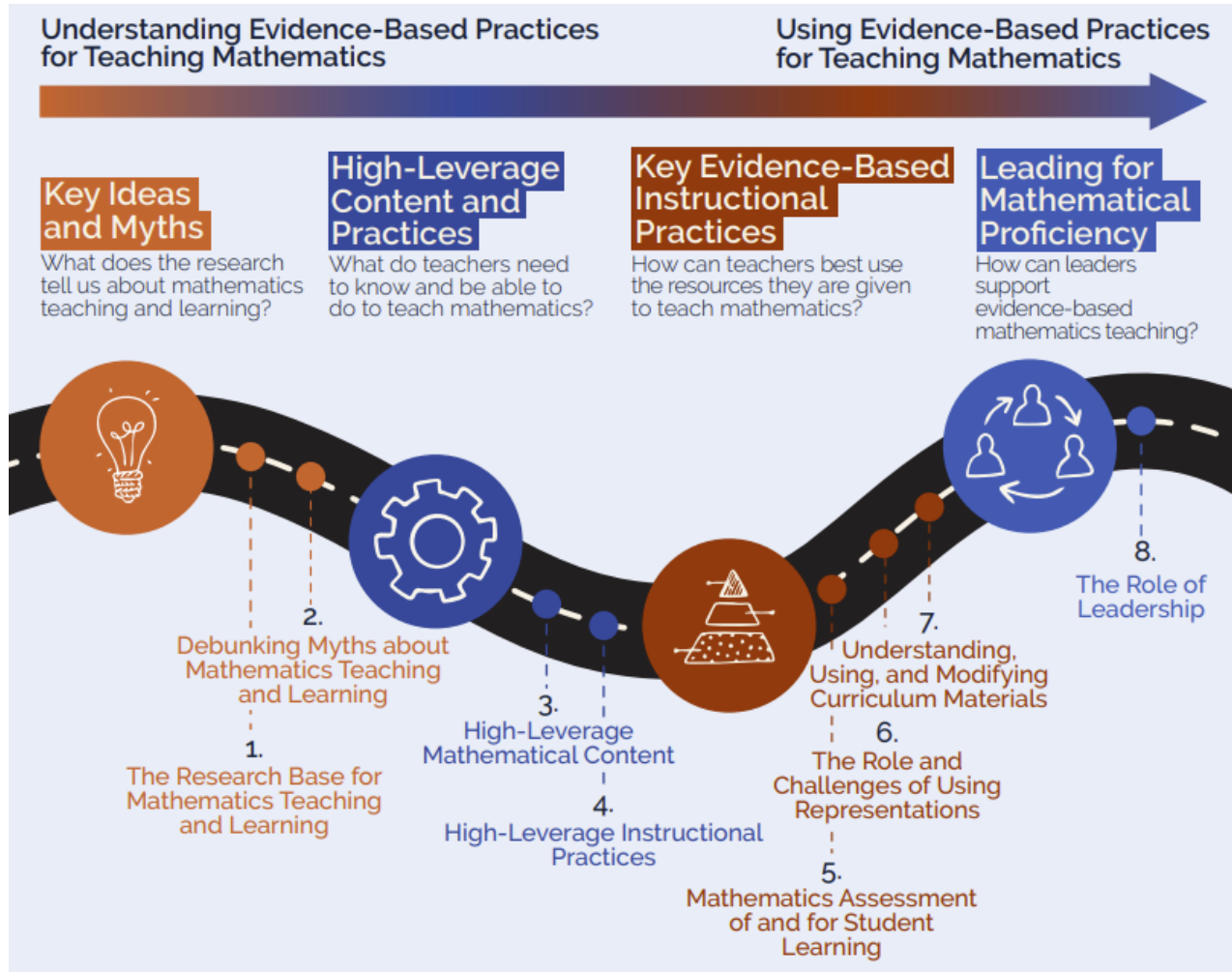
Prekindergarten through Grade Eight

Domain	NY-3.OA	Operations and Algebraic Thinking	
Cluster Heading	Solve problems involving the four operations, and identify and extend patterns in arithmetic.		
Standards	8. Solve two-step word problems posed with whole numbers and having whole-number answers using the four operations.	<p>Coherence: NY-2.OA.1 → NY-3.OA.8 → NY-4.OA.3</p> <p>Note: Two-step problems need not be represented by a single expression or equation.</p>	Coherence Linkages
	<p>a. Represent these problems using equations or expressions with a letter standing for the unknown quantity.</p> <p>b. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p>		
	9. Identify and extend arithmetic patterns (including patterns in the addition table or multiplication table).	Coherence: NY-2.OA.3 → NY-3.OA.9 → NY-4.OA.5	Notes to Clarify & Connect Standards
	<p>Connecting the Standards for Mathematical Practice to Mathematical Content:</p> <ul style="list-style-type: none"> Students will analyze a number of situation types for multiplication and division, including arrays and measurement contexts. Extending their understanding of multiplication and division to these situations requires that they make sense of problems and persevere in solving them (MP.1), look for and make use of structure (MP.7) as they model these situations with mathematical forms (MP.4), and attend to precision (MP.6) as they distinguish different kinds of situations over time (MP.8).^[14] 		

High School Courses and Plus (+) Standards

Conceptual Category	AI-A.APR	Algebra	
Domain		Arithmetic with Polynomials and Rational Expressions	Algebra I
Cluster Heading	Understand the relationship between zeros and factors of polynomials.		
Standards	3. Identify zeros of polynomial functions when suitable factorizations are available. (Shared standard with Algebra II)	<p>Coherence: AI-A.APR.3 → AII-A.APR.3</p> <p>Note: Algebra I tasks will focus on identifying the zeros of quadratic and cubic polynomial functions. For tasks that involve finding the zeros of cubic polynomial functions, the linear and quadratic factors of the cubic polynomial function will be given (e.g., find the zeros of $P(x) = (x - 2)(x^2 - 9)$).^[14]</p>	Coherence Linkages
			Citation
	<p>Within-Grade Connections:</p> <ul style="list-style-type: none"> Identifying zeros of polynomial functions (AI-A.APR.3) is connected to using the structure of an expression to identify ways to rewrite it (AI-A.SSE.2) and to using an algebraic process to find zeros of a function (AI-F.IF.8a). 		

Overview of Briefs and Roadmap



Baldwin Union Free School District



K-5 Mathematics

- Core Program: Eureka Math²
- Math Tools
 - iReady
 - Magma Math



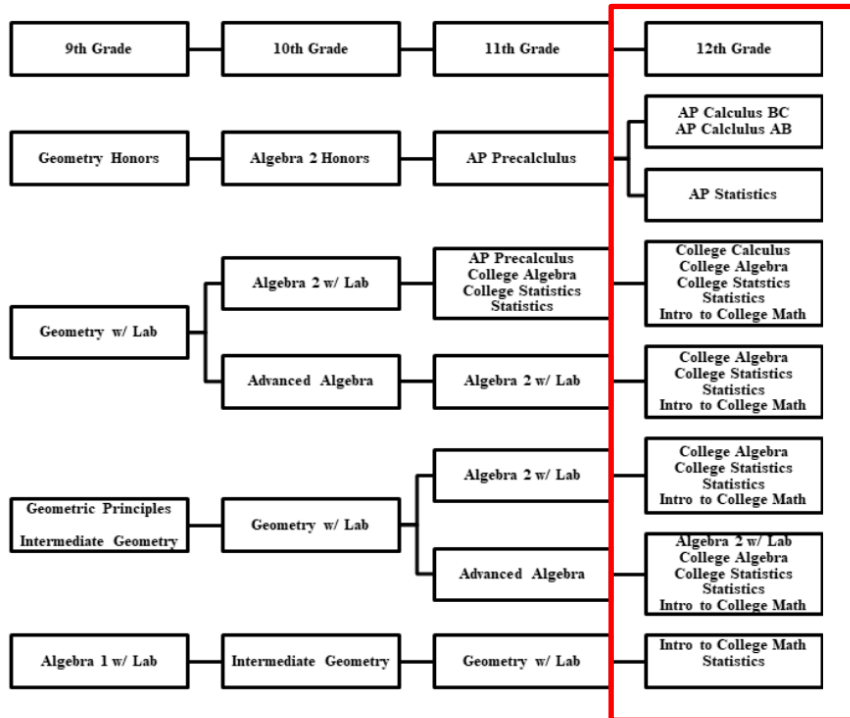
6-8 Mathematics

- Core Programs:
 - Eureka Math²
 - Teacher Created Units
 - Algebra Coursework
- Math Tools
 - iReady
 - IXL
 - Delta Math
 - Castle Learning

High school Programs & Course Offerings

MATHEMATICS DEPARTMENT

Suggested Course Pathways



Electives



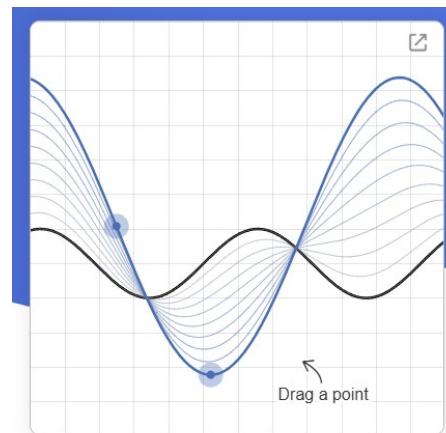
BALDWIN HIGH SCHOOL
COURSEBOOK 2025-26
www.baldwinschools.org/coursebook



Baldwin Union Free School District

9-12 Math Tools

- Math Tools
 - iReady
 - IXL
 - Delta Math
 - Castle Learning
 - Desmos



Elementary Example

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Which number sentence is true?

A $\frac{3}{8} < \frac{1}{4}$

B $\frac{1}{2} < \frac{3}{6}$

C $\frac{3}{5} = \frac{8}{10}$

D $\frac{2}{3} = \frac{4}{6}$

Common Core Example

39

This question is worth 2 credits.

How can the fraction $\frac{1}{2}$ be used to compare the fractions $\frac{3}{5}$ and $\frac{4}{10}$? Be sure to include a number sentence using the symbols $>$, $<$, or $=$ to compare the fractions $\frac{3}{5}$ and $\frac{4}{10}$ in your answer.

Explain how you determined your answer.

Next
Generation
Example

Secondary Example

6 The function f is shown in the table below.

x	$f(x)$
0	1
1	3
2	9
3	27

Common Core Example

Which type of function best models the given data?

- (1) exponential growth function
- (2) exponential decay function
- (3) linear function with positive rate of change
- (4) linear function with negative rate of change

3 Which scenario represents an exponential relationship?

- (1) Kirsten's New Year's resolution is to lose one pound each week.
- (2) Sarah wants to increase her grade by 5 points each quarter.
- (3) Tommy wants to reduce his spending by \$50 each month.
- (4) Dylan hopes to grow his business by 5% each month.

Next
Generation
Example

Questions?



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Public Schools

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We are **Inclusive!**

We are **Involved!**

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