# Pre-AP Algebra 1 and New York State Next Generation Mathematics Learning Standards: Alignment Summary

Pre-AP courses focus deeply on a limited number of concepts and skills with the broadest relevance for high school coursework and college and career success. The course framework serves as the foundation of the course and defines these prioritized concepts and skills.

When teaching a Pre-AP course, teachers have purposeful time and space to bring their own voice and lessons into each unit to best meet the needs of their students and address the full range of state standards. This alignment summary demonstrates the deep connections between the Pre-AP Algebra 1 Course Framework and the New York State Next Generation Mathematics Learning Standards to support teachers and schools in their planning. Along with the corresponding standards crosswalk, teachers and schools can use this alignment summary when planning and preparing to implement Pre-AP Algebra 1.
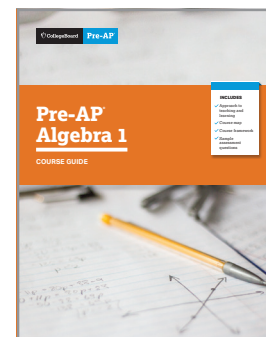
Alignment at a Glance: Very Strong

NY Next Generation Mathematics:

- **Creating Equations**
- **Interpreting Functions**
- **Linear, Quadratic, and Exponential Models**
- **Reasoning with Equations and Inequalities**
- **Seeing Structure in Expressions**

Discipline Highlights

✓ Overall, the alignment between the Pre-AP Algebra 1 Course Framework and the NY Next Generation Mathematics standards is very strong.

✓ Across all 10 domains of the NY Next Generation Mathematics standards, the majority of standards are covered in full or in part by the Pre-AP course framework.

✓ The NY Next Generation Mathematics standards and the Pre-AP course framework share the deepest alignment within the Linear, Quadratic, and Exponential Models and Interpreting Functions domains.

🍎 = **Very strong alignment**

🍎 = **Partial alignment**

Alignment between the Pre-AP Algebra 1 Course Framework and the NY Next Generation Mathematics standards is described as *very strong* or *partial*. A *very strong* alignment is one in which the majority of standards are fully addressed by the mapped Pre-AP Learning Objectives (LOs). A *partial* alignment is one in which the standards are partially addressed by the corresponding Pre-AP Learning Objectives. Partial alignment can occur when one framework includes greater specificity or extends beyond the scope of the other framework. Given the focused nature of the Pre-AP course framework, some partial alignments are to be expected.

Alignment at a Glance: Partial

NY Next Generation Mathematics:

- **Arithmetic with Polynomials and Rational Expressions**
- **Building Functions**
- **Interpreting Categorical and Quantitative Data**
- **Quantities**
- **The Real Number System**

Discipline Highlights

✓ While the overall alignment between the NY Next Generation Mathematics standards and the Pre-AP Algebra 1 framework is very strong, there are a few areas of partial alignment due to differences in the level of specificity in certain areas.

✓ Pre-AP has a more intentionally narrow focus on a prioritized set of concepts, so certain topics are considered outside the scope of the Pre-AP course. For example, standard AI-A.REI.3 involves solving linear equations in one variable. This topic is typically covered in detail in pre-algebra courses, so it was not chosen as a focus topic for Pre-AP Algebra 1.

✓ Though not fully addressed in Pre-AP Algebra 1, Interpreting Categorical and Quantitative Data is covered in depth in Pre-AP Geometry with Statistics.

Summary

Beyond alignments to the course framework, it is also important for educators to turn to the Pre-AP Shared Principles and Pre-AP Mathematics Areas of Focus to understand the full picture of alignment between Pre-AP Algebra 1 and the NY Next Generation Mathematics standards. The shared principles and areas of focus represent the Pre-AP approach to teaching and learning, and these principles deeply address skill development and disciplinary practices that cannot be easily captured within a standards crosswalk. **In summary, there are ample opportunities for teachers to address the NY Next Generation Mathematics standards with confidence throughout this course.**
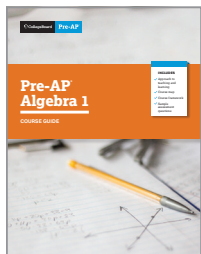
Learn more about Pre-AP Algebra 1 at preap.org

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