Pre-AP Algebra 1 and Common Core State Standards for Mathematics: 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 Common Core State Standards (CCSS) for Mathematics Appendix A Traditional Pathway: Algebra 1 High School Course 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

CCSS for Mathematics:

- Linear and Exponential Relationships

Discipline Highlights

✅ Overall, the alignment between the Pre-AP Algebra 1 Course Framework and the CCSS for Mathematics is very strong.

✅ Across the five units of the Appendix A Traditional Pathway: High School Algebra 1 Course, the majority of the CCSS standards are addressed in full or in part by the Pre-AP Algebra Course Framework.

✅ The deepest alignments are in the CCSS Linear and Exponential Relationships unit.

✅ The Pre-AP Algebra 1 Course Framework is fully aligned to the CCSS standards F-IF.1–7. The Pre-AP Algebra 1 model lessons provide extensive opportunities to model linear and exponential functions and interpret their key features in context.

= Very strong alignment

= Partial alignment

Alignment between the Pre-AP Algebra 1 Course Framework and the CCSS for Mathematics is described as very strong or partial. A very strong alignment is one in which the majority of standards are 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

**CCSS for Mathematics:**
- Relationships Between Quantities and Reasoning with Equations
- Expressions and Equations
- Quadratic Functions and Modeling
- Descriptive Statistics

**Discipline Highlights**

- While the overall alignment between the CCSS for Mathematics and the Pre-AP Algebra 1 Course Framework is strong, there are a few areas of partial alignment due to differences in the level of specificity in certain areas.

- The Pre-AP Algebra 1 Course Framework has a more intentionally narrow focus on a prioritized set of concepts than the CCSS for Mathematics does. For example, the CCSS standard A.REI.3 involves solving linear equations in one variable. This skill is typically covered in a pre-algebra course, so it is not a focus topic for Pre-AP Algebra 1. Instead, this skill is embedded in Pre-AP Algebra 1 model lessons that cover CCSS standards such as A.REI.1, A.REI.5, and A.REI.6.

- Though not fully addressed in Pre-AP Algebra 1, the Descriptive Statistics unit is covered in depth in Pre-AP Geometry with Statistics. The statistics unit in Pre-AP Geometry with Statistics addresses the CCSS standards S.ID.A.1–3. These standards cover topics such as describing data distributions, computing and interpreting summary statistics, and recognizing trends in data.

**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 CCSS for Mathematics. 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 CCSS for Mathematics with confidence throughout this course.**

Learn more about Pre-AP Algebra 1 at [preap.org](http://preap.org)