Pre-AP Algebra 1 and Colorado Academic Standards: 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 Colorado Academic Standards: Mathematics 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

Colorado Academic Standards: Mathematics

- Creating Equations
- Interpreting Functions
- Linear, Quadratic and Exponential Models
- Reasoning with Equations and Inequalities

Discipline Highlights

- Overall, the alignment between the Pre-AP Algebra 1 Course Framework and the Colorado Academic Standards: Mathematics is very strong.
- Across seven of the eight grade level expectations for the Colorado Academic Standards: Mathematics, the majority of the standards are addressed in full or in part by the Pre-AP course framework.
 - The Colorado Academic Standards: Mathematics and the Pre-AP course framework share the strongest alignment in the Interpreting Functions and the Linear, Quadratic and Exponential Models grade level expectations.

= Very strong alignment

= Partial alignment

Alignment between the Pre-AP Algebra 1 Course Framework and the Colorado Academic Standards: Mathematics 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

Colorado Academic Standards: Mathematics



- Arithmetic with Polynomial and Rational Expressions
- Seeing Structure in Expressions
 Building Functions

Discipline Highlights

- While the overall alignment between the Colorado Academic Standards: Mathematics and the Pre-AP Algebra 1 framework is very strong, there are a few areas of partial alignment due to the more granular nature of some of the Colorado Academic Standards: Mathematics.
- The Colorado Academic Standards: Mathematics include more specific statements than the Pre-AP learning objectives. For example, standard F-IF.C.7 has five parts. While the Pre-AP Algebra 1 learning objectives address the first two parts of the standard, the remaining parts are not fully addressed. As a result, this standard is given a rating of partial.
 - Pre-AP has a more intentionally narrow focus on a prioritized set of concepts, so certain topics are considered outside of the scope of the
 Pre-AP course. For example, the Trigonometric
 Functions grade level expectation is outside of the stated purview of the Pre-AP Algebra 1 course framework and is not addressed by the learning objectives.

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 Colorado Academic Standards: 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 Colorado Academic Standards: Mathematics with confidence throughout this course.**



Learn more about Pre-AP Algebra 1 at preap.org