Pre-AP Algebra 2 and Arkansas Mathematics 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 2 Course Framework and the Arkansas Mathematics 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 2.

Alignment at a Glance: Very Strong

Arkansas Mathematics Standards:

- The Complex Number System
- Interpreting Functions
- Building Functions
- Seeing Structure in Expressions
- Vector and Matrix Quantities

Discipline Highlights

- Overall, the alignment between the Pre-AP Algebra 2 Course Framework and the Arkansas Mathematics Standards is very strong.

- In eleven of the fourteen domains, the majority of the Arkansas Mathematics Standards are addressed in full or in part by the Pre-AP Algebra 2 Course Framework, with the remaining domains covered in depth in Pre-AP Algebra 1 and Pre-AP Geometry with Statistics.

- The deepest alignments to the Arkansas Mathematics Standards are in the domains of The Complex Number System, Seeing Structure in Expressions, Interpreting Functions, Building Functions, and Vector and Matrix Quantities.

Alignment between the Pre-AP Algebra 2 Course Framework and the Arkansas 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

Arkansas Mathematics Standards:

- Arithmetic with Polynomials and Rational Expressions
- Creating Equations
- Interpreting Categorical and Quantitative Data
- Linear, Quadratic, and Exponential Models
- Reasoning with Equations and Inequalities
- Making Inferences and Justifying Conclusions

Discipline Highlights

- While the overall alignment between the Arkansas Mathematics Standards and the Pre-AP Algebra 2 Course Framework is very strong, there are a few areas of partial alignment due to differences in the level of specificity in certain areas.

- The Pre-AP Algebra 2 Course Framework is intentionally focused on functions as a prioritized set of concepts. Therefore, certain topics fall outside the scope of the Pre-AP Algebra 2 Course Framework. For example, the standard in the domain of Expressing Geometric Properties with Equations referring to conic sections is outside the scope of the framework.

- Though not fully addressed in Pre-AP Algebra 2, the content standards in the domain of Making Inferences and Justifying Conclusions are covered in depth in Pre-AP Geometry with Statistics. And, the content standards in the domain of The Real Number System are covered in depth in Pre-AP Algebra 1.

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 2 and the Arkansas 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 Arkansas Mathematics Standards with confidence throughout this course.

Learn more about Pre-AP Algebra 2 at preap.org

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