### Frequently Asked Questions Alaska Mathematics Standards

Did Alaska adopt the Common Core State Standards?

Alaska did not adopt the Common Core State Standards. Adopting states agreed to accept the standards in their entirety and not change them in the future. Alaska did not want to be bound by these restrictions.

What is an academic standard?

- Academic standards are statements of what students are expected to know and be able to do at specific grade levels.
- Standards focus on essential concepts, knowledge, and skills necessary for students to succeed.
- Standards are designed to increase student achievement.

Are the Alaska Mathematics Standards curriculum?

No. It is the responsibility of the local school districts to develop curriculum that is aligned to the Alaska Standards. Curriculum is the plan, including the use of instructional materials, for how students will meet the standards.

What are some of the ways Alaskan students will benefit from the Alaska Mathematics Standards?

Alaska Mathematics Standards will:

- Help prepare students with the knowledge and skills needed to be successful in college and careers.
- Provide a deeper understanding of the content presented.
- Develop, apply, and assess their mathematical knowledge.

# How are the Alaska Mathematics Standards different from the Grade Level Expectations?

The Grade Level Expectations (GLEs) were the previous set of standards used by Alaskan educators. The major differences include:

- The Alaska Mathematics Standards extend to graduation. The GLEs went through grade 10.
- The Alaska Mathematics Standards delve deeper into topics, providing an opportunity for complete mastery before moving to new information; they are more rigorous than the GLEs.
- The GLEs were a blueprint for assessment. The Alaska Mathematics Standards prepare students for higher education and successful careers.
- The Alaska Mathematical Standards blend key mathematical practices with rigorous content to promote a solid mathematical background based on reasoning.

Toward preparing students to be college, career, and culturally ready graduates



http://education.alaska.gov

#### Are there different instructional strategies in the new Alaska Mathematical Standards?

Yes. In the mathematics standards there are three key shifts, which will encourage changes to instructional practices and curriculum.

- **Focus:** In each grade, or course, focus deeply on 2-4 topics.
  - o For each grade level there are fewer big ideas to be covered.
- **Coherence**: Concepts logically connect from one grade to the next and link to other major topics within each grade.
  - o There is a progression of topics, allowing for deeper learning each year. This also avoids the reteaching of topics each year.
- **Rigor**: In major topics the standards pursue with equal intensity: conceptual understanding, procedural skill and fluency, and application.
  - o The standards explicitly start with the goal of career and college readiness. Planning backwards from graduation to elementary school developed a body of knowledge to support this goal.

## What is the Department of Education & Early Development doing to help districts, schools, and teachers transition to the Alaska Mathematics Standards?

The Department of Education & Early Development has spent the last year working with districts and schools through the awareness and transition phases for the new standards. During this time, the new standards were introduced. EED provided guidance to assist in the shift to a new way of teaching and learning.

The goal for this year is to work extensively on trainings, tools, and online resources that will help teachers begin to successfully implement the new Alaska Mathematics Standards. These will include:

- Fall and Spring Teaching & Learning Support Institutes
- Online Professional Learning Supports including:
  - Webinars
  - Modules
  - o Instructional Supports

#### How are the Alaska Mathematics Strategies organized?

There are two sets of standards, which work in unison to provide a deep understanding of the topics covered in each grade level or course.

- Standards of Mathematical Practice
  - These standards stress procedural skills and conceptual understanding. They seek to define experiences that build understanding of mathematics and ways of thinking in which students develop, apply, and assess their knowledge.
- Standards of Mathematical Content
  - o The content is grouped into domains, which are large groups of related standards.
  - In grades K-8 there are grade-level expectations within each domain. Mastering the material in each grade-level domain sets the foundation for new material each year.
  - In high school, content material moves to conceptual categories taught in the form of courses (Algebra, Functions, Geometry, Statistics & Probability) that build on concepts learned in grades K-8.

