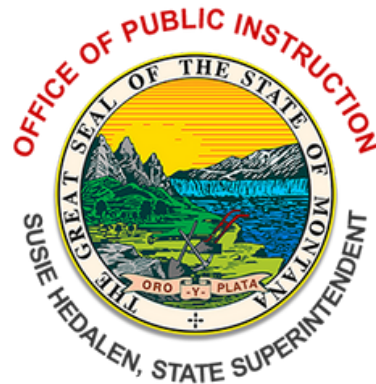


Montana's New Math Standards

What Pre-Service Teacher Educators (Higher Educators) Need to Know

ONLINE RESOURCES



Why Did We Update the Math Standards?

We updated the math standards to make them clearer, more useful, and better for students, families, and educators.

- **Based on New Research:** The standards now include the latest ideas on how students learn math best, with new ways to teach and learn math that connect to students' lives.
- **Keeping Up with Today's World:** The standards include skills students need, like understanding data, using technology, and exploring jobs in trades and careers.
- **Easier to Understand:** We removed unnecessary details so teachers, students, and families can understand and use the standards better.

What's Different?

- The total number of standards has been reduced, making them more focused and easier to teach, while maintaining rigor.
- Math standards require contextual examples relevant to Montana's Indigenous Peoples and local communities.
- Elementary standards emphasize essential skills like time and money.
- The standards emphasize critical thinking, problem-solving, and data literacy—skills students need for college, careers, and active citizenship.
- High school students can choose math courses aligned with their career goals, supporting diverse post-graduation pathways.

How Higher Educators Can Support Implementation:

- Update course content and materials to reflect the new Montana mathematics standards, including both content and practice standards.
- Explicitly teach the new Mathematical Practices, and model how to incorporate them into lesson planning and classroom discourse.
- Embed opportunities for teacher candidates to analyze and design standards-aligned tasks, lessons, and assessments using the updated standards and instructional guidance.
- Introduce vertical alignment and progression thinking to help candidates understand how student understanding builds over time.
- Collaborate with K-12 schools to align field experiences and student teaching placements with classrooms implementing the new standards.
- Engage in ongoing professional learning and connect with OPI updates or task force members from Montana Colleges and Universities to ensure preparation programs remain aligned with current expectations.