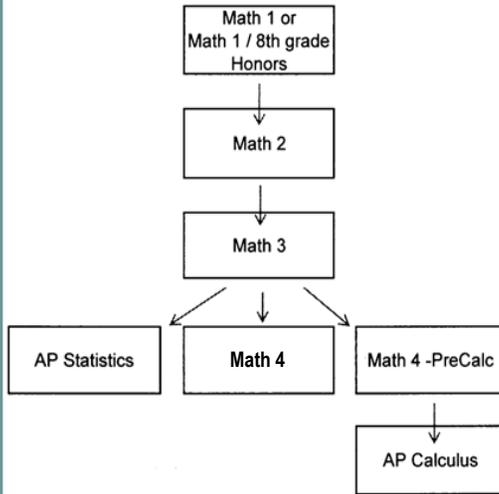
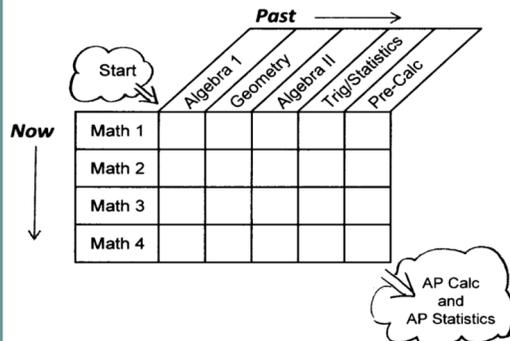


What's the next high school class?



How does this compare to the math I learned?



Most high school math was learned in course sequence in isolated topics (diagram: left to right). Your child will learn the same standards in a different order, learning some algebra, geometry, trigonometry , statistics and pre-calculus, while gaining depth each year.

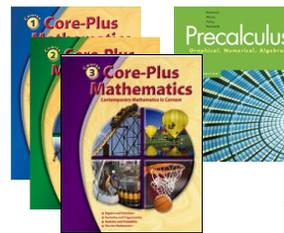
Middle School Connected Math Project 2

<http://connectedmath.msu.edu/>
<http://www.phschool.com/cmp2/>



High School Core Plus Edition 2, and Demana Waits Pre-Calculus

<http://www.wmich.edu/cmp/>
http://wps.aw.com/aw_demana_precalculus_7/



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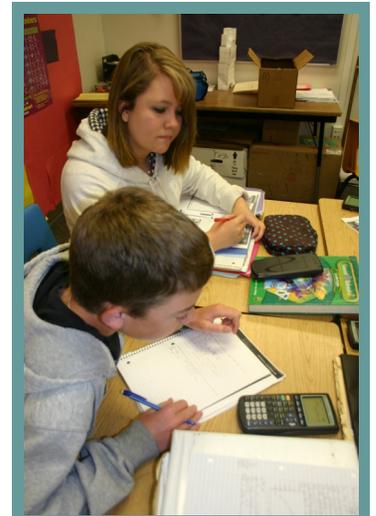
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MESA COUNTY VALLEY SCHOOL DISTRICT 51

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Secondary Mathematics



FREQUENTLY ASKED QUESTIONS

How has our understanding of learning math evolved since I learned math? We know that students learn mathematics when they have a foundation in “hands on” learning. This includes concrete, real world experiences that build through a pictorial representation to abstract thinking (the CRA model). Math needs to make sense, connect to other subject areas and to the world. Math is learned best in context, when relevant to students. Both middle and high school resources bring real world context into lessons and address state and national standards.

Do my children still need to know their math facts? Yes. Students need to know their facts with accuracy (three second recall). Students have better retention when they learn the concepts first, then procedures.

What have been students’ perceptions and attitudes?

Historically, students have perceived these resources to be challenging, making them think. They felt more confident in solving mathematical problems. Group work helped them learn to communicate mathematically.

WHAT ABOUT ELEMENTARY MATHEMATICS?

The elementary math adoption has been fully implemented which completes our K-12 alignment. This adoption was also based on research and how students learn mathematics. All 25 elementary schools are using the same core materials and curriculum documents.

Middle School

How will middle school math look different?

The *Content Standards* will continue to be the rich basis for the middle school mathematics program. These materials will increase our focus on the *Standards for Mathematical Practice* (problem solving, reasoning & proof, communication, connections, representation, etc.). Rather than learning the surface level of many concepts, students will learn fewer concepts at a deeper level. Rather than doing a large quantity of repetitive problems, students may focus more on fewer, richer problems that require a higher level of mathematical thinking.

How can I support my child if he/she is struggling in math?

At the start of each unit, a parent letter will come home outlining the key concepts for the unit and a guide for reinforcing the concepts learned at school. The deep learning around concepts comes from students building their understanding through discovery over several days of investigation. The parent letters, website, and games will help guide you how to support your child’s learning without giving away the important discovery still to come in the lesson. <http://connectedmath.msu.edu/components/resources.shtml#parent>

<http://www.phschool.com/cmp2/>

How will acceleration be addressed with these materials?

The CMP materials are rigorous. They substantially raise the level of mathematical thinking and reasoning for all students. Some students, however, may still be ready for a faster pace and deeper learning around concepts. For these students there will be “Honors” classes available at each grade level. Eighth grade students on an honors pace can complete Math 1 (8th Grade Honors) for high school credit.

High School

Will colleges recognize and accept Math 1, 2, 3 and 4? Yes. Universities have been accepting students with similar transcript designations for over 15 years.

What calculator will my child need?

Starting with Math 1, students will use a TI-84 Plus Silver Edition graphing calculator for homework and in class. This costs between \$100 - 130 and will be used throughout high school and college. Schools will have limited numbers of calculators for rent, and will have an engraver for students’ use.

How can I help with homework?

Asking questions about what your child understands is often helpful without taking away a student’s ability to understand the concept supporting a procedure or formula. The high school parent support page can be found at <http://www.wmich.edu/cmp/parentresource2/helpingwithhomework.html>

What can my child take for a senior year of math? Colorado Universities require four years of high school math. Our high schools will offer options for the fourth year of mathematics including two Math 4 courses (a pre-calculus course and a course aimed at students interested in a non-technical career) as well as AP-Calculus and AP-Statistics.

Worried your student will lose their calculator? Consider having them help earn it.

