FAQ sheet for 8th grade math night - EUHSD

We hope that the following information answers any questions you may have about EUHSD's math program. The narrative and answers are based on a variety of parent, student and community questions that have been posed to us over the course of our transition to Integrated Math.

What is Integrated Math?

An Integrated math program offers an opportunity for students to experience mathematics study as a connected whole, rather than partitioning mathematics topics into discrete courses, such as Algebra, Geometry, and Algebra II. Over the course of the first three years, students will be exposed to the same content standards that they would be in a traditional program, but they have been carefully rearranged to allow students to make deeper connections across different branches of mathematics. A benefit of this Integrated model, is that it offers a more well-rounded experience as students engage in thinking about important ideas in areas like Algebra and Functions, Probability and Statistics, Geometry and Trigonometry and Discrete mathematics starting in 9th grade and advances the level of understanding in each area through the grades.

The adoption of the new CA State Standards provided an opportunity for school districts in CA to look carefully at their math program offerings. Many local and state school districts, including EUHSD, have chosen to follow the Integrated Math pathway.

What will we see in math classrooms across EUHSD?

At EUHSD, we are committed to creating a program where students enjoy doing math, where students feel that math makes sense, and where students see the relevance of math in their daily lives. We also are committed to preparing students for whatever college or career goals they may have, in fact, we believe the former are vital components of a high school math program that successfully prepares students for the future.

We believe that in order to accomplish these goals, our classrooms need to be places where our students work collaboratively to solve and make sense of rich problems, explain their thinking to and ask genuine questions of one another. Students look for patterns and make connections as they make sense, generalize and justify their mathematical ideas. Research strongly indicates that engaging in these practices supports student enjoyment, efficacy and learning of math.

EUHSD has chosen *Core-Plus Mathematics-Contemporary Math in Context*, as the curricular resource to support the goals of our math program. *Core-Plus Math* is a problem-based, inquiry-oriented program that builds upon the theme of mathematics as reasoning and sense-making. Through investigations of real-life contexts, students develop a rich understanding of important mathematics that makes sense to them and which, in turn, enables them to make sense out of new situations and problems. The materials support the promotion of meaningful student discourse that helps build strong conceptual understanding, as students move from informal to more abstract ideas.

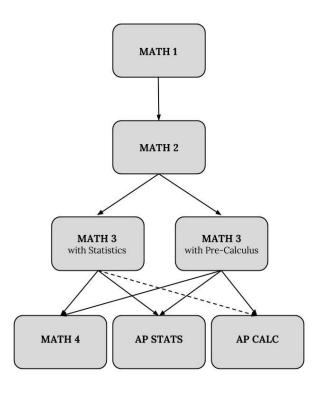
Core-Plus emphasizes problem-solving and high expectations for *all* throughout the four-year program. Each course is built around challenging real-life problems that will be engaging for all students and the program includes a variety of course materials that allow for additional challenge, review, extension or deeper connections between ideas. The EUHSD math program starts with all 9th graders entering into Math 1, proceeding to Math 2, and then broadens to offer different options as students progress through their high school math experience.

What are the options for kids over four years in math?

The graphic at right shows the pathways available to all students over four years.

Note: Dashed line from *Math 3 with Statistics* indicates that a student finishing that course may be able to transition to AP Calculus with mutual consent and/or additional study.

We intend to provide review opportunities for any student who feels the need for additional study as preparation for AP math courses in the fourth year.



Additional Questions

Q: Does my child need a graphing calculator?

A: Yes. We will have graphing calculators available for **all** students to check out through the library just like a textbook - to be returned at the end of each school year. If you would like to purchase one on your own, the checked out calculators are Texas Instruments, TI-84 Plus, but any graphing calculator will do.

Q: Will colleges accept Integrated Math?

A: Yes, an Integrated high school math program meets the UC's a - g requirements which are also accepted at CSU's. Further info can be found here:

http://www.ucop.edu/agguide/a-g-requirements/c-mathematics/fag/index.html

Q: Will there be Honors classes?

A: We will not be offering Honors in the first year course, Math 1.

Q: Will my child be able to take AP Calculus in 12th grade?

A: Yes. See the right hand pathway in the graphic above. In addition, students who choose the Math 3 with Statistics pathway may still choose to take AP Calculus in the 4th year. We will provide a variety of opportunities for additional Calculus preparation for any students.

Q: How can I help my child at home?

A: The most important thing you can do with your child is to ask them genuine, curious questions about their mathematical thinking. You could also consider trying the task together as a family. You are not responsible for teaching the content to your student and it's okay for them to have unanswered questions from their work if they have persevered at trying to understand the problems. These can provide productive points of conversation the next day in class. If your students are stuck, you might encourage them to write out what they know about the problem situation and what they need to have answered in order to begin to solve the problem. Encourage your student to list what they do know about the problem situation, what similar problems it reminds them of, and what they wonder about the situation described in the task. In addition to your support at home, all of our school sites provide many tutoring resources for students, in class and after school.

Additional questions may be addressed to Abi Leaf, EUHSD Math Specialist, 760-291-3003 or aleaf@euhsd.org