



### **Frequently Asked Questions**

#### **About The Common Core Math Transition 2014-2015 Secondary Mathematics (Grades 6 – 12)**

This is an exciting time for SDUSD schools—what we teach must evolve to keep pace with the expectation that all students graduate college and/or career ready. Beginning in the 2014-2015 school year, SDUSD and districts across the nation continue implementing the Common Core State Standards. The Common Core State Standards in Math (CCSSM) require a change in the course content for mathematics in grades 6 – 12 along with incorporation of the Math Practice Standards—those “habits of mind” students use while successfully learning the mathematics.

#### **WHAT ARE THE COMMON CORE STATE STANDARDS?**

The Common Core State Standards (CCSSM) are world –class standards that reflect the kind of rigor demonstrated in academically high-achieving nations. The CCSSM were designed with college and career readiness in mind so that students can successfully compete in a global economy.

#### **HOW WILL THE SUPPORT FOR COLLEGE AND CAREER READINESS BE DIFFERENT?**

The introduction of the new standards gives SDSUD an opportunity to better define a coherent, focused and rigorous math curriculum. The new standards ask students to deeply understand math and its processes. The Math Practice Standards define the thinking and the processes that students use in learning the mathematics in a meaningful way. These include problem solving, reasoning, making and proving conjectures, using appropriate tools, and explaining their thinking around rich mathematical experiences. Students will be asked to work together more often to solve problems and to precisely discuss their thinking and reasoning. What’s important to know is that teachers will be focused on fewer concepts to allow students to gain a deeper, more meaningful understanding of these concepts. The standards are a well-developed coherent progression of concepts. According to the best mathematicians, the Common Core State Standards are much more rigorous, coherent and relevant.

#### **WHY DID THE GRADE 6-12 MATH COURSE AND SEQUENCE CHANGE?**

All students should have learning experiences that make sense as they move from course to course to ensure that they will be college-ready by the end of high school. The new course sequence in mathematics creates a coherent program, focusing deeply on fewer concepts and concentrating on bigger ideas. Students gain a stronger foundation from which to build their mathematical competency. At SDSUD, all secondary schools offer this new course sequence (that is, the order in which students are taking their math classes) so that students can build upon their conceptual understanding from year to year. Rather than taking a different set of standards each year, students will experience a progression of coherent standards, each building upon those of the previous year.

#### **WHAT DOES THE NEW COURSE SEQUENCE LOOK LIKE IN MIDDLE SCHOOL?**

In middle school all students will take math classes that include and integrate algebra, number and operation, geometry, statistics and probability at each grade level. These new courses are called CCSSM Math 6, Math 7 and Math 8. This new course sequence continues to build a solid foundation for the Integrated Math sequence in high school. Math 8 includes about half of the content of the Algebra 1-2 course (under the previous 1997 California standards) as well as additional geometry and statistics topics. This is a new course that is being implemented this school year, 2014-15. The 8<sup>th</sup> grade math course is more rigorous than the old Algebra 1-2 course – as is stated in the new California Mathematics Framework. It expects students to be able to know and apply the content in real world problems and situations.

#### **WHAT IF MY CHILD IS READY FOR MORE ADVANCED MATH IN MIDDLE SCHOOL?**

Being advanced no longer means skipping a course or jumping ahead. All of the content in the CCSSM courses are necessary and are designed to build upon each other. Students who, through multiple measures, have demonstrated they are ready for more advanced math will have the opportunity to take the Accelerated Pathway in Middle School, a compaction of 3 years of math in 2 years. The accelerated math classes, Accelerated Math 6 and Accelerated Math 7,

compact the standards from 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grades in two years. This allows students to begin the high school Integrated Math sequence in 8<sup>th</sup> grade.

#### **HOW WAS THE DECISION MADE TO GO THE INTEGRATED SEQUENCE IN HIGH SCHOOL?**

Teachers began to discuss the possibility in department chair meetings two years ago. That discussion continued last year with teachers and the Math Task Force. They examined the traditional and Integrated Math pathways and found that the same standards applied to both pathways, but the sequencing is different. They discussed the pro's and con's of both in district meetings and at their site; reviewed California state guidelines and recommendations; reviewed the Smarter Balanced Assessments and expectations; and explored research and current practice. The advice of the UCSD as well as the Community College District was sought. It was a collective decision of teachers, administrators, Math Task Force, and higher education that integrated curriculum would best meet the needs of our students.

#### **WHAT DOES THE NEW COURSE SEQUENCE LOOK LIKE IN HIGH SCHOOL?**

With a solid foundation of CCSSM Math in grades 6 – 8, students will be more prepared to successfully meet the University of California's "a –g" requirement and SDUSD graduation requirements. Students will begin the CCSS Integrated Math three-year sequence in 9<sup>th</sup> grade. Senior year students have a number of options, including Pre-calculus and/or Statistics or AP Statistics.

#### **WHAT DOES THE ADVANCED SEQUENCE LOOK LIKE IN HIGH SCHOOL?**

The Advanced Integrated Math pathway compacts the 4 years of mathematics, 3 Advanced Integrated Math Series and Pre-calculus, into 3 years. The content within the three Advanced Integrated Math courses contains all of the Integrated Math content plus additional Pre-calculus content. Students who begin the Advanced Integrated series in 9<sup>th</sup> grade have the opportunity to take AP Calculus AB in 12<sup>th</sup> grade. (Students beginning this series in 8<sup>th</sup> grade would have the opportunity to take AP Calculus AB in 11<sup>th</sup> grade.)

#### **WHAT IF MY CHILD TOOK ALGEBRA 1-2 or ADVANCED ALGEBRA 1-2 LAST YEAR IN 8th GRADE?**

As SDUSD makes the transition, multiple measures will be used to determine the most appropriate placement in 9<sup>th</sup> grade. During this transition year, many students will enroll in Integrated Math I; Advanced. Students who are in Integrated Math I, Advanced will strengthen their skills and build a strong foundation for the compacted Advanced Integrated Math sequence that leads to AP Calculus AB in the 12<sup>th</sup> grade. Some students may be best placed in Integrated Math II or Integrated II Advanced. Students who enroll in Integrated Math II or Integrated Math I, Advanced will be eligible to take AP Calculus AB in the 12<sup>th</sup> grade. Students who enroll in Integrated Math II, Advanced will be eligible for Calculus by 11<sup>th</sup> grade.

#### **WHAT IF MY CHILD TOOK GEOMETRY, ADVANCED GEOMETRY (OR BEYOND) LAST YEAR IN 8<sup>th</sup> GRADE?**

Students who are in Geometry or beyond will not enroll in the Integrated Sequence, but continue with the traditional sequence of courses. 2014-15 will be the last year for Intermediate Algebra or Advanced Intermediate Algebra.

#### **WHAT IF MY CHILD TOOK ADVANCED ALGEBRA 1-2? LAST YEAR IN 7<sup>th</sup> GRADE?**

Students in 7<sup>th</sup> grade will have the opportunity to take Integrated Math I, Advanced or CC Math 8, depending on placement guidelines which include a combination of CST scores, grades, and placement test.

#### **HOW ARE WE PREPARING TEACHERS FOR THIS CHANGE?**

The transition to the Common Core State Standards in Mathematics began a few years ago. Introduction to the new standards and in particular the Math Practice standards began 3 years ago. Summer Institutes and additional professional development for both Elementary and Secondary has been ongoing.

New instructional materials for Middle School Mathematics and High School Integrated Mathematics have been purchased and teachers are participating in professional development to learn the materials and to support strong implementation of the common core state standards including both the content standards and the Mathematics Practice Standards. In addition, scope and sequences, pacing guides and other instructional supports for all of these courses, as well as assessments, have been/are being developed.

Also, during this first transition year from the traditional sequence to the Common Core (middle school) or Integrated (high school), there may be slight gaps and overlaps in content. Teachers are aware of this and are being guided to tailor instruction to address this issue- emphasizing new areas of learning, de-emphasizing areas already developed.

**Website Resources:** Please refer to the San Diego Unified School District Website for more information. From the main page side-bar, click on “Common Core State Standards” and then on the “For Parents & Student” blue box:

- Common Core State Standards – Mathematics
- Math Practice Standards
- Mathematics Pathways:
  - Mathematics Common Core Pathways, Grades 6-12 (Overview)
  - Math Pathways: 2014-2016, At-A-Glance (Transition)
  - Brief Course Descriptions for Secondary Math Courses
- FAQs – Common Core Math Transitions 2014-15