

SCUSD

Updated
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Mathematics Course Placement Guidelines for Middle Schools and High Schools

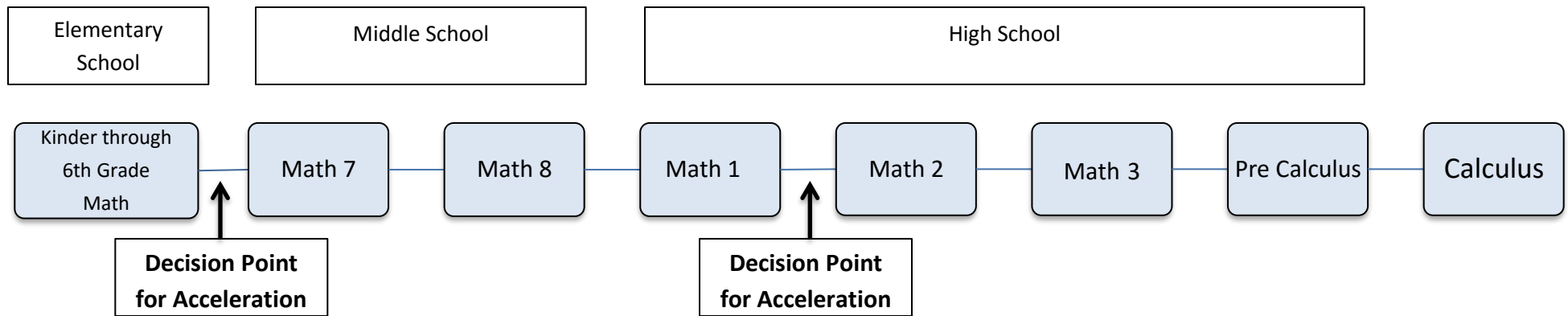
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Overview

The California Common Core State Standards for Mathematics (CA CCSS-M) ensure all students are ready for success after high school by establishing clear, consistent guidelines for what every student should know and be able to do from kindergarten through 12th grade. The standards outline the knowledge, skills, and behavioral expectations that are necessary for students to be college and career ready upon high school graduation, with each grade-level's standards building upon the previous grade-level.

Within the regular course progressing from kindergarten through high school, SCUSD has created opportunities for placement into accelerated/advanced courses at 2 "decision points". See progression below.



Students who are prepared and willing to advance through the mathematics standards at an accelerated rate have the opportunity to be placed in accelerated/advanced courses at two separate points in their math education.

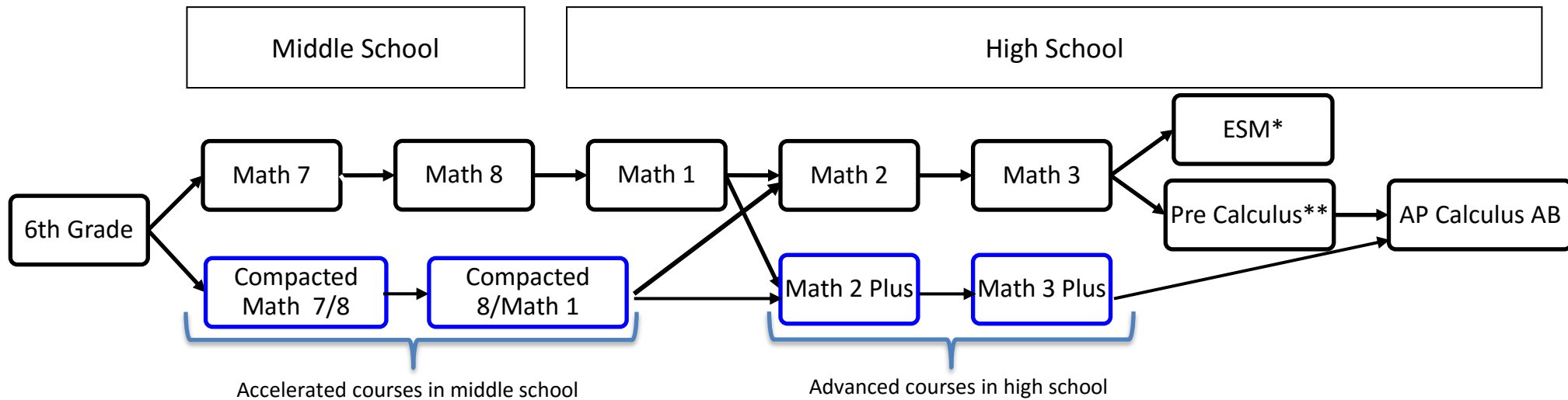
The first decision point comes after 6th grade as students enter middle school and the second decision point comes after students have completed Math 1 (either in middle school or high school). For students who are seeking to complete AP Calculus in high school, e.g. students who are interested in entering a STEM major (science, technology, engineering, or math) at college, these decision points provide opportunities to do so.

All students in SCUSD have the opportunity to be placed in an accelerated/advanced mathematics course, at either or both decision points. District-wide placement criteria have been established for both decision points in order to determine the most appropriate placement for students.

This document outlines the progression of mathematics courses offered in middle schools and high schools in SCUSD, placement recommendations for high school transfer students from out-of-district, as well as the placement guidelines for entering into our accelerated/advanced math courses.

For questions or comments regarding the information presented in this document, please contact Mikila Fetzer, Math Coordinator (mikila-fetzer@scusd.edu).

SCUSD Secondary Course Progression



*ESM is the EAP Senior Math course, designed for seniors who have taken Math 1 – Math 3 and who are not necessarily prepared or interested in taking Pre-Calculus during their senior year.

**Pre Calculus or other available option, like Statistics

Placement Criteria for Entering Compacted Math 7/8:

- 6th grade report card scores (trimester 2)
- Placement assessment: MDTP and open-response tasks
- Recommendations for placement (from teacher, administrator, student (self), and/or parent/legal guardian).

See "Placement Criteria Guidelines for Middle School" [pg. 8](#)

Placement Criteria for Entering Math 2 Plus:

- Math 1 transcript grades
- Placement assessment: Math 1 EOC Exam
- Recommendations for placement (from teacher, administrator, student (self), and/or parent/legal guardian).

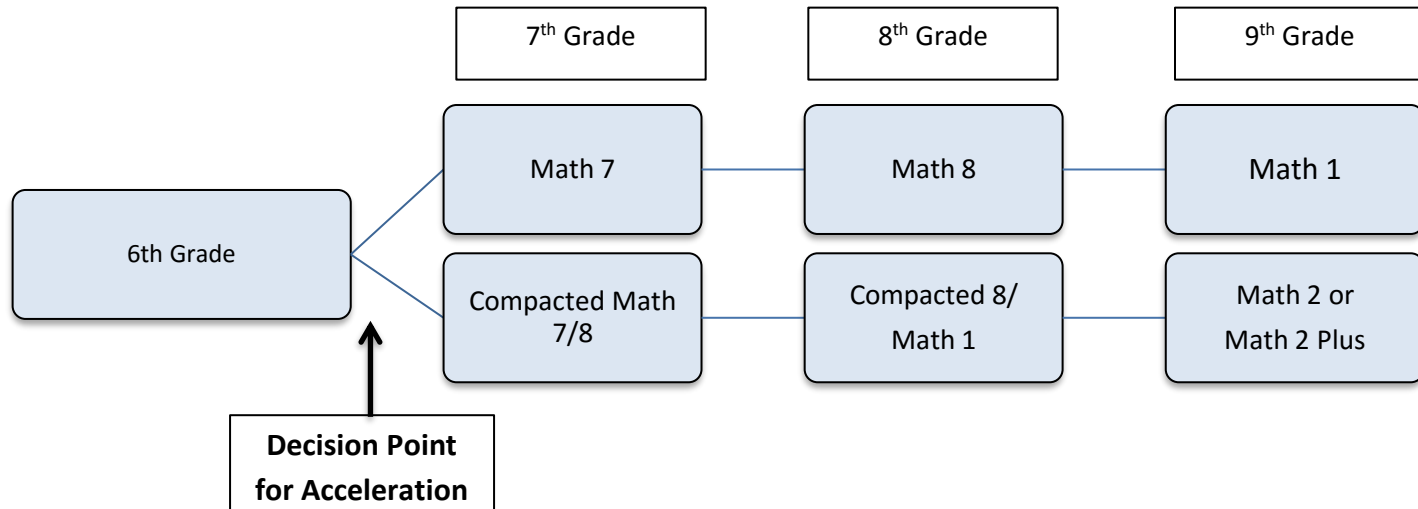
See "Specific Placement Guidelines for Math 2 Plus" [pg. 12](#)

Students can advance in middle school by compacting 3 years of math (Grade 7, Grade 8, and Integrated Math 1) into 2 years.

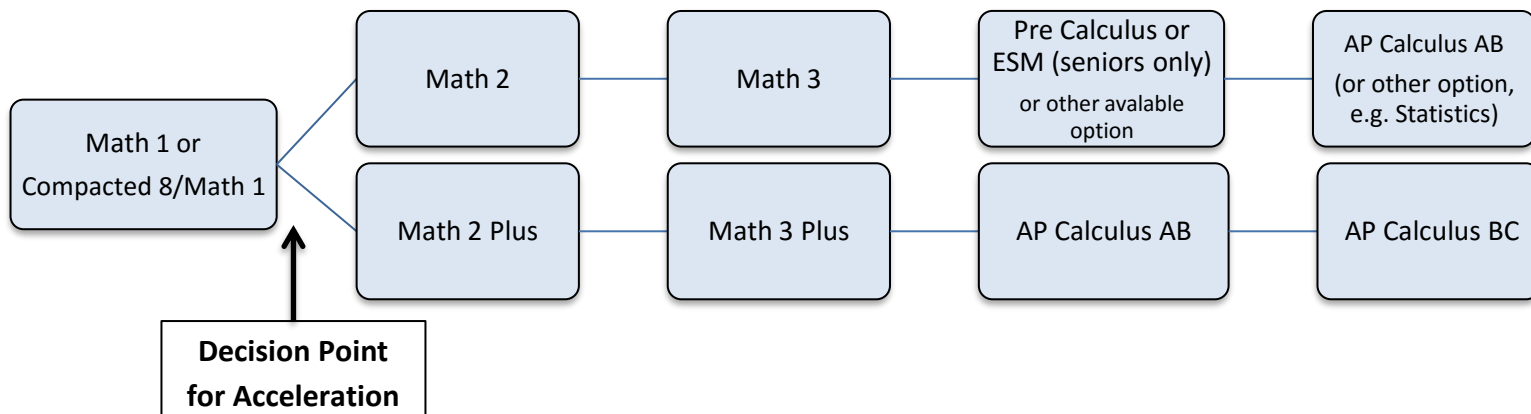
Students can advance in high school by taking Math 2 Plus and Math 3 Plus, which include the Pre-Calculus standards embedded over both years.

Students who are successful in Math 2 Plus and Math 3 Plus will take AP Calculus AB the following year.

Flow Chart: Middle School Course Progression



Flow Chart: High School Course Progression



High School Mathematics Graduation Requirements for SCUSD

To graduate high school in SCUSD, students must take 2 years of mathematics courses in high school (grades 9 – 12), consisting of:

- (Integrated Pathway) 1 year of Integrated Math 1 + 1 year of Integrated Math 2 (or Math 2 Plus)
or
- (Traditional Pathway) 1 year of Algebra 1 + 1 year of Geometry

SCUSD only offers courses from the Integrated Pathway (Math 1, Math 2, Math 3), though students who transfer to SCUSD from out-of-district may have taken mathematics courses from the Traditional Pathway (Algebra 1, Geometry, Algebra 2).

For students who have taken a **combination** of Traditional Pathway courses (Algebra 1, Geometry, Algebra 2) and Integrated Pathway courses (Math 1, Math 2, Math 3), they must have the following courses in order to graduate:

Year 1* Math Course	Year 2* Math Course	Does this count as 2 years of math towards HS graduation? (Yes/No)
Algebra 1	Math 1	No
Algebra 1	Math 2	Yes
Geometry	Math 1	Yes
Geometry	Math 2	Yes
Math 2	Algebra 2	Yes
Math 3	Algebra 2	Yes
Math 3 or Algebra 2	Any course <i>above</i> Math 3 (e.g. Pre-Calculus, IB Math, AP Calculus, Statistics)	

**Or vice versa*

High School Transfer Students from Out-of-District

For students who transfer to SCUSD from out-of-district and have taken mathematics courses from the Traditional Pathway (Algebra 1, Geometry, Algebra 2), consult the chart below for placement recommendations.

Mid-Year Transfer Students			
At his/her previous high school, student was enrolled in:	Recommended Placement in SCUSD	To confirm placement, consult:	Other Options (if recommended placement is unsuccessful)
Algebra 1	Math 1	Math 1 Readiness Assessment*; Teacher/student/parent recommendation	
Geometry	Math 2	Math 2 Readiness Assessment; Teacher/student/parent recommendation	Math 1
Algebra 2	Math 3	Math 3 Readiness Assessment; Teacher/student/parent recommendation	Math 2 or Math 2 Plus

Beginning of the Year Transfer Students			
At his/her previous high school, student <i>passed</i> :	Recommended Placement in SCUSD	To confirm placement, consult:	Other Options (if recommended placement is unsuccessful)
Algebra 1	Math 2	Math 2 Readiness Assessment; Teacher/student/parent recommendation	Math 1 <i>(Note: this will not count as 2nd year math course towards graduation)</i>
Geometry	Math 3	Math 3 Readiness Assessment; Teacher/student/parent recommendation	Math 2
Algebra 2	Pre-Calculus, ESM, or other available option	Consult placement criteria for ESM; Teacher/student/parent recommendation	Math 3

*Readiness assessments are provided by our mathematics textbook publisher, Walch Education, online at www.walchconnect.com

Placement Criteria Guidelines: Middle School

Grade	Course	Course Description	Criteria Used to Determine Placement in this Course	Placement Guidelines based on Criteria	Placement Options for the <i>Following</i> Academic Year
7	Math 7	<ul style="list-style-type: none"> Grade 7 CA CCSSM standards Textbook: <i>Big Ideas Math Course 2</i> 	<ul style="list-style-type: none"> 6th grade report card grades (trimester 2) Placement assessment: MDTP and open-response tasks 	<ul style="list-style-type: none"> 7th grade students who do <i>not</i> meet the guidelines below for Compacted Math 7/8 will be placed in Math 7 <i>Intervention:</i> School sites can use 6th grade report card grades as well as the MDTP 7th Grade Readiness Assessment to identify students who may need intervention or additional support during 7th grade 	<ul style="list-style-type: none"> Math 8 (recommended) <i>In special circumstances</i> Compacted 8/Math 1 <ul style="list-style-type: none"> Students will need to demonstrate proficiency on a challenge test
7	Compacted Math 7/8 (accelerate course)	<ul style="list-style-type: none"> All of Grade 7 CA CCSSM standards Approximately half of Grade 8 CA CCSSM standards Textbooks: <i>Big Ideas Math Course 2</i> and <i>Big Ideas Math Course 3</i> 	<ul style="list-style-type: none"> 6th grade report card grades (trimester 2) Placement assessment: MDTP and open-response tasks¹ Recommendation for placement into Compacted Math 7/8² (<i>optional</i>) 	<ul style="list-style-type: none"> Report Cards <ul style="list-style-type: none"> Trimester 2, Mathematics Standards Achievement, Academic; Performance Level of 3 or 4 Placement Assessment: MDTP and open-response tasks* <ul style="list-style-type: none"> Students who score above 70% on the MDTP will get their open-ended items scored Cut score for open-response tasks: TBD Recommendations for placement into Compacted Math 7/8 <ul style="list-style-type: none"> Available electronically and via paper May be completed by a teacher, administrator, parent/legal guardian, and/or student (self) If student did not meet exam cut score: <ul style="list-style-type: none"> Triggers evaluation of open-response tasks Follow-up conversation with student advocate to be scheduled 	<ul style="list-style-type: none"> Compacted 8/ Math 1 (recommended) <i>In special circumstances</i> Math 8 <ul style="list-style-type: none"> Students who received a D or F in Compacted Math 7/8 may be placed in Math 8 the following year

¹ 6th grade students will be assessed in two parts: 1) The UC Davis Math Diagnostic Testing Project (MDTP) for Grade 7 Readiness multiple-choice exam, and 2) Open-response tasks by Mathematics Assessment Resource Service (MARS), which require written responses and explanations.

² Recommendation forms are used for consideration into Compacted Math 7/8 and may be submitted by teachers, administrators, parents/legal guardians, and/or students (self).

Grade	Course	Course Description	Criteria Used to Determine Placement in this Course	Placement Guidelines based on Criteria	Placement Options for the Following Academic Year
8	Math 8	<ul style="list-style-type: none"> • Grade 8 CA CCSSM standards • <i>Textbook:</i> Big Ideas Math Course 3 	7th grade completion	<ul style="list-style-type: none"> • All students who completed Math 7 in 7th grade will take Math 8 in 8th grade • Students who received a D or F in Compacted Math 7/8 in 7th grade may be placed in Math 8 in 8th grade • <i>Intervention:</i> School sites can use 7th grade report card grades as well as the MDTP 8th Grade Readiness Assessment to identify students who may need intervention or additional support during 8th grade 	<ul style="list-style-type: none"> • Math 1
8	Compacted 8/Math 1 (accelerated course)	<ul style="list-style-type: none"> • Approximately half of Grade 8 CA CCSSM standards • All of Integrated Math 1 CA CCSSM standards • <i>Textbooks:</i> Big Ideas Math Course 3 and Walch Integrated Math 1 	<ul style="list-style-type: none"> • Report card grades • <i>In special circumstances</i>, a challenge test 	<ul style="list-style-type: none"> • Students who successfully completed Compacted Math 7/8 will continue to Compacted 8/Math 1 (grades of C or better) • Students who received an A or B in Math 7 and demonstrate proficiency on a challenge test can be placed in Compacted 8/Math 1. 	<ul style="list-style-type: none"> • Math 2 • Math 2 Plus

Placement Criteria Guidelines: High School

Note: 2 years of math in high school are required for graduation. To be admitted to most 4-year universities (including CSU and UC schools), students must take at least 3 years of math in high school (4 years of math is encouraged).

Course	Course Description	Criteria Used to Determine Placement in this Course	Placement Guidelines based on Criteria	Placement Options for the Following Academic Year
Math 1	<ul style="list-style-type: none"> Integrated Math 1 CA CCSSM standards <i>Textbook:</i> Walch Integrated Math 1 	Middle school completion	<ul style="list-style-type: none"> All students who completed Math 8 in 8th grade will be placed in Math 1 as incoming 9th graders Students who receive an F in Math 1 will need to retake Math 1 <i>Intervention:</i> School sites can use 8th grade report card grades as well as the MDTP High School Readiness Assessment to identify students who may need intervention or additional support during Math 1 	<ul style="list-style-type: none"> Math 2 Math 2 Plus
Math 2	<ul style="list-style-type: none"> Integrated Math 2 CA CCSSM standards <i>Textbook:</i> Walch Integrated Math 2 	<ul style="list-style-type: none"> Math 1 semester grades Placement assessment: Math 1 End-of-Course (EOC) Exam¹ 	<ul style="list-style-type: none"> Students who pass Math 1 (grade of D or better) and who do <i>not</i> meet the guidelines below for placement into Math 2 Plus will be placed in Math 2 	<ul style="list-style-type: none"> Math 3 (recommended) <i>In special circumstances</i> Math 3 Plus <ul style="list-style-type: none"> Students will need to demonstrate proficiency on a challenge test
Math 2 Plus (advanced course)	<ul style="list-style-type: none"> Integrated Math 2 CA CCSSM standards Approximately half of the Pre-Calculus standards <i>Textbook:</i> Walch Integrated Math 2 with Honors Supplement 	<ul style="list-style-type: none"> Math 1 semester grades Placement assessment: Math 1 End-of-Course (EOC) Exam Recommendation for placement into Math 2 Plus (<i>optional</i>)² 	<ul style="list-style-type: none"> Student placement will be determined by a combination of a student's report card grade from Math 1, their Math 1 End-of-Course Exam score, and a recommendation form submission. <p style="text-align: center;"><i>See table on page 10 for specific placement guidelines.</i></p>	<ul style="list-style-type: none"> Math 3 Plus (recommended) <i>In special circumstances</i> Math 3 <ul style="list-style-type: none"> Students who receive a D in Math 2 Plus may be placed Math 3 the following year.

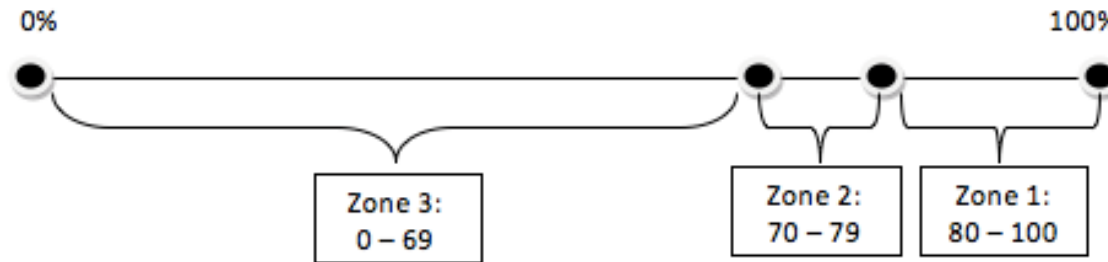
¹ The Math 1 EOC Exam is a summative assessment of Math 1 standards, containing a variety of item types (including multiple choice and open-response tasks).

² Recommendation forms are used for consideration into Math 2 Plus and may be submitted by teachers, administrators, parents/guardians, and students (self)

Course	Course Description	Criteria Used to Determine Placement in this Course	Placement Guidelines based on Criteria	Placement Options for the Following Academic Year
Math 3	<ul style="list-style-type: none"> Integrated Math 3 CA CCSSM standards <i>Textbook:</i> Walch Integrated Math 3 	<ul style="list-style-type: none"> Math 2 semester grades 	<ul style="list-style-type: none"> Students who pass Math 2 (grade of D or better) will be placed in Math 3 Students who received a D in Math 2 Plus may be placed Math 3 	<ul style="list-style-type: none"> Pre Calculus ESM (EAP Senior Level Math)⁵ Statistics Other available options
Math 3 Plus (advanced course)	<ul style="list-style-type: none"> Integrated Math 3 CA CCSSM standards Approximately half of the Pre Calculus standards <i>Textbook:</i> Walch Integrated Math 3 with Honors Supplement 	<ul style="list-style-type: none"> Math 2 Plus semester grades <i>In special circumstances, a challenge Test</i> 	<ul style="list-style-type: none"> Students who pass Math 2 Plus (grade of C or better) will be placed in Math 3 Plus Students who received an A or B in Math 2 and can demonstrate proficiency on a challenge test can be placed in Math 3 Plus. 	<ul style="list-style-type: none"> AP Calculus AB (recommended) Other available options (including Pre Calculus, ESM, and Statistics)
EAP Senior Year Math (ESM)	<ul style="list-style-type: none"> Content from Math 1, Math 2, and Math 3 with an emphasis on problem solving, patterns, and writing in math <i>Note:</i> This is an <i>elective</i> course (does not receive math credit for A-G requirements) 	<ul style="list-style-type: none"> Semester grades from Math 1, Math 2, and Math 3 SBAC scores from 11th grade 	<ul style="list-style-type: none"> This course is recommended for students who want to take 4 years of math in high school and are planning on attending a 2-year or 4-year college following high school. Students must be in 12th grade Completed and passed Math 1, Math 2, and Math 3 (D or higher) Scored “conditionally ready” on Smarter Balanced 11th grade summative assessment 	<ul style="list-style-type: none"> Math course at a 2-year or 4-year university
Pre Calculus	<ul style="list-style-type: none"> CA Precalculus standards, comprised of plus (+) standards from all domains of CA CCSSM <i>Textbook:</i> Varies by site 	<ul style="list-style-type: none"> Math 3 semester grades 	<ul style="list-style-type: none"> Students who pass Math 3 (grade of C or better) 	<ul style="list-style-type: none"> AP Calculus AB (in high school) Calculus (in college) Other math course at a 2-year or 4-year university

Specific Placement Guidelines for Math 2 Plus

Zones of Math 1 End-of-Course Exam Scores (2015-16)



Math 2 Course Placement			
Math 1 EOC Exam score "zone"	Highest Grade Earned in Math 1 *	Recommendation Form Submitted**	Course Placement
Any zone	F <i>In any semester</i>		(repeat) Math 1
Zone 1 Score ≥ 80	A – D		Math 2 Plus
Zone 2 $70 \geq \text{score} \geq 79$	A <i>Cannot have lower than a B in either semester</i>		Math 2 Plus
Zone 2	B – D	Y	Math 2 Plus
			Math 2
Zone 3 Score ≤ 69	A <i>Cannot have lower than a B in either semester</i>	Y	Math 2 Plus
			Math 2
Zone 3	B – D		Math 2

**Placement recommendations are based on a student's highest grade earned in Math 1, from either their Term 2 or Term 4 transcript grades. If a student earned an F in any semester, they will need to repeat the semester(s) they failed.*

***This includes any recommendation form submitted by a teacher, parent/guardian, principal or other site administrator, or student (self). The recommendation form is **optional**, though it will allow students who fall within a certain "zone" or grade-range the opportunity to take Math 2 Plus.*

Timeline for Placement Decisions

6th Grade Placement Assessment and Recommendation Timeline

End of March – Beginning of April	Assessments and supporting documents delivered to school sites
Mid April – Beginning of May (Return answer documents to SCUSD District Office by May 6)	Testing window open for 6 th grade placement assessment, administered by teachers in all 6 th grade math classes: <ul style="list-style-type: none"> • MDTP • Open-Response Tasks
Mid April – Beginning of May (Paper recommendation forms must be submitted to SCUSD District Office by May 6)	Recommendation Forms become available to teachers, parents/legal guardians, administrators, and students. Submit Recommendation Forms for placement into Compacted Math 7/8, either electronically or via paper by May 6. <i>Forms may be submitted by a teacher, administrator, parent/legal guardian, and/or student (self)</i>
By end of May	Scoring of placement assessments <ul style="list-style-type: none"> • MDTP scored by UC Davis • Open-Response Tasks scored by Math Training Specialists
End of May – Beginning of June	SCUSD Mathematics Coordinator and the Assessment, Research, and Evaluation (ARE) Department organize data in a spreadsheet (6 th grade report card grades from Trimester 2, placement assessment scores, and recommendation form submissions) to make placement recommendations for all 6 th grade students.
Beginning of June	Assessment results and placement recommendations will be shared with school sites.

Math 1 Placement Assessment and Recommendation Timeline

Beginning of May	Assessments and supporting documents delivered to school sites. Recommendation Forms become available to teachers, parents/legal guardians, administrators, and students.
Mid May – end of school year	Testing window open for Math 1 End-of-Course Exam, administered by teachers in all Math 1 and Compacted 8/Math 1 classes
Mid May – end of school year	Submit Recommendation Forms for placement into Math 2 Plus to a student’s current school (only paper forms available for 2016). <i>Forms may be submitted by a teacher, administrator, parent/legal guardian, or student (self).</i> Recommendation forms will be scanned and inputted into Infinite Campus.
By last day of school	Teachers score their students’ Math 1 EOC Exams and input scores in Infinite Campus by June 17.
By end of June	SCUSD Mathematics Coordinator and the Assessment, Research, and Evaluation (ARE) Department organize data in a spreadsheet (Math 1 report card grades, Math 1 EOC Exam scores, and recommendation form submissions) to make placement recommendations for all Math 1 students.
End of June	Assessment results and placement recommendations will be shared with school sites.

Understanding the Placement Assessments

The following assessments are given to all 6th grader students towards the end of the school year, administered by the 6th grade math teacher. These assessments are used as part of the criteria for determining placement into either Math 7 or Compacted Math 7/8.

1) MDTP

- The UC Davis Math Diagnostic Testing Project (MDTP) for Grade 7 Mathematics Readiness is a multiple-choice exam that measures readiness for a Grade 7 math course.
- The test assesses critical content from grade 3 through grade 6 and highlights gaps and misunderstandings commonly held by students.
- The assessment is scored electronically by UC Davis, and data about student performance gets reported to the district (including student weaknesses on specific topics).
- The cut-score for the MDTP is 70%, which triggers scoring the open-response tasks.

2) Open-Response Tasks by Mathematics Assessment Resource Service (MARS)

- In addition to the MDTP, students will complete 3 open-response tasks written by the Mathematics Assessment Resource Service (MARS).
- These tasks require students to show their work and often explain their response and/or their process for solving the problem.
- SCUSD Mathematics Training Specialists will score the open-response tasks for students who scored above 70% on the MDTP.
- Cut score for open-response tasks: TBD

The following assessment is given to all Math 1 and Compacted 8/Math 1 students towards the end of the school year, administered by their math teacher. This assessment is used as part of the criteria for determining placement into either Math 2 or Math 2 Plus.

3) Math 1 End-of-Course (EOC) Exam

- The Math 1 EOC Exam is a summative assessment of Math 1 standards containing a variety of item types, including multiple choice and open-response tasks.
- This exam is *not* a high school graduation requirement.
- The exam has two parts and is scored out of 40 points:
 - Selected Response and Short Answer (25 points): taken online via Illuminate and scored electronically
 - Constructed Response (15 points): taken paper/pencil and hand-scored by the teacher, then inputted into Illuminate