

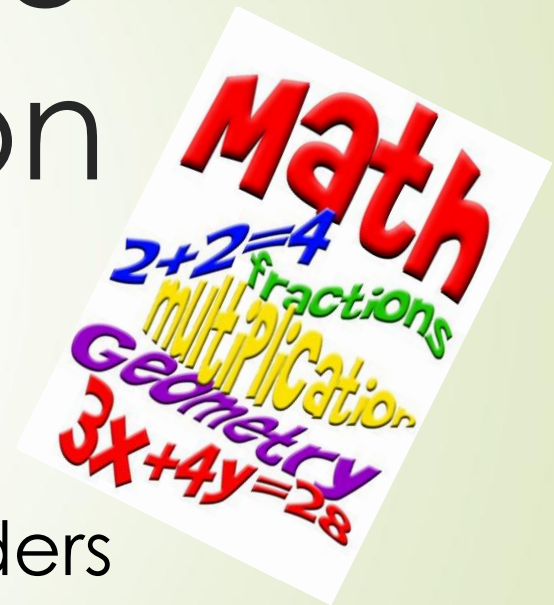
Parents' Middle School 6th-Grade Math Information Night

Presenters at each site:
Math Instructional Leaders


Fletcher: Becky Rea, Sept 20, 2018

Greene: Sarah Pierce, Aug 29, 2018

JLS: Elizabeth Fee, Sept 5 & 6, 2018



Details of PAUSD Math Placement can be found in the following online searchable document (just click on the table of contents):



- <https://www.pausd.org/curriculum/secondary-math-placement>

Agenda:



6th Grade Math



6th to 7th Grade

Placement Process:



Lane vs Track



Rubric for next course



Math Pathways



After 6th grade



Common Core State Standards in Math (CCSS-Math)

- Adopted by 45 states including California
- Smarter Balanced Tests, aligned to these standards, are in the Spring
- 2 Types of Standards: *Mathematical Practices* and *Content* by Grade Level
- 8 Mathematical Practices for all K-12 students

Eight Common Core Mathematical Practices

Grades K-12

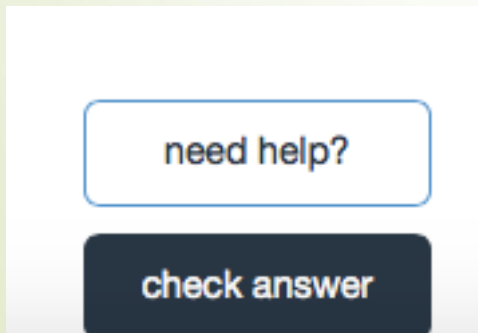
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Math 6

- Students follow the 6th grade Common Core State Standards. (CCSS Math 6)
- The *content* includes Ratios & Proportional Relationships, the Number System (Rational numbers), Expressions & Equations, Geometry, and Statistics and Probability.
<http://www.cde.ca.gov/ci/ma/cf/documents/mathfwgrade6lmg2.pdf>
- Students are heterogeneously grouped in 6th grade and work both independently and in cooperative group situations with instruction that is differentiated to appropriately challenge all students.
- Extension and enrichment opportunities are available to all students.




Textbook

- Big Ideas Course 1
- Allows students to do HW via an online platform.
- If a student misses a question a help button will pop up! If they click on it...it will prompt them with a video. In some cases there will be an option to chat with a person to get help.



A screenshot of a "Help" pop-up window. The window has a dark blue header with the word "Help" in white and a close button (an 'X' in a circle) in the top right corner. Below the header, the text "Having trouble? Try this first:" is displayed. A white box contains the title "Solving Equations by Multiplication or Division" and two options: "WATCH VIDEO" with a play button icon and "REVIEW LESSON" with a document icon. Below this box, the text "Need more help? Give these a try too:" is shown. A horizontal line separates this from the next section, which has the title "Operations with Integers" and a "REVIEW LESSON" option with a document icon. At the bottom of the window, there is a dark blue footer with a book icon and the text "See Multi-Language Glossary".

Online HW Teacher Info

SECTION 1.3 EXERCISES	HW Part 2  Start: 08/22/2017 9:17AM	Solving Equations with Variables on Both Sides Students: All Due: 08/25/2017 9:17PM	 MESSAGE	19/30 STUDENTS SUBMITTED	99.5% AVG SCORE	 ACTIONS
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	Item Summary	Item List
< 50% of students answered these items correctly	0/10	
50% up to 75% of students answered these items correctly	0/10	
≥ 75% of students answered these items correctly	10/10	16, 19, 21, 23, 25, 29, 30, 35, 39, 40

HW PART 1	SUBMITTED 08/23/2017 05:35:28 PM	87.5% 3.5/4	0:39:52				
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Note: Students can do the same problems from the textbook (typically problem numbers will be posted on schoology.) However, we think the support from the online system is powerful and we do recommend it.

If your student does not have easy internet access at home, please reach out to your teacher (or use Homework Habitat)

6th Grade Differentiation

- For those that need extra challenge
 - **Differentiation means going deeper in a topic— *not a different topic or a different curriculum***
 - Extensions of classroom problems and investigations
 - Join *Math Club* at any of the MS sites
- For those that need additional help
 - See your math teachers in the after school drop-in time slot
- *Any student*
 - May work with their teacher or any another math teacher outside of class.

As students leave the 6th grade program, teachers suggest placement in one of two courses, Math 7 and Math 7A, according to:

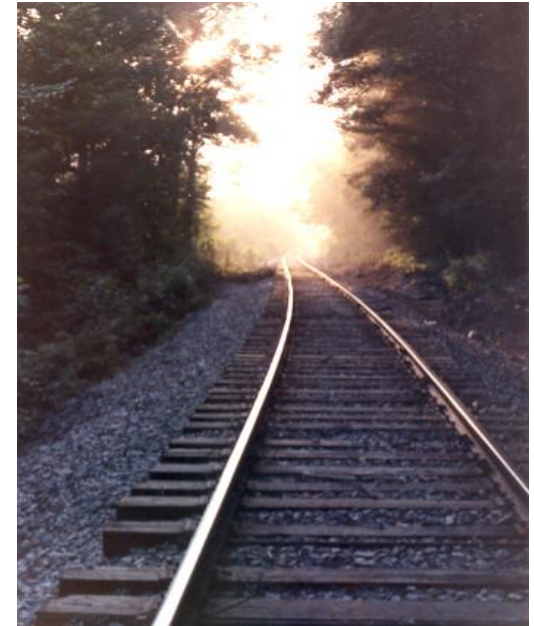
- ✓ Student response to challenge (readiness for acceleration), and
- ✓ Student demonstrated performance with the CCSS-Math 6 curriculum.

The two courses are the beginning of PAUSD's *laning system* for the secondary math course offerings.

LANING VS. TRACKING



LANING = flexible



TRACKING = rigid

PAUSD has a *laning* system.

The *laning* system allows students to move among levels of a course at the end of a year (or sometimes the semester) as their interest and success in a course shifts.

So, what are the differences between Math7 & Math7A*?



**A = Accelerated and Advanced*

Math 7

CCSS: Math 7, only

- Ratios & Proportional Relationships
 - Proportions
- The Number System
 - Fractions
- Expressions & Equations
 - Order of Operations
 - Applications
- Geometry
 - Draw & construct figures
 - Angles, area, volume
- Statistics & Probability
 - Random sampling & inferences
 - Compare populations
 - Use probability models

Math 7A

CCSS: Math 7 (see first column)

- Ratios & Proportional Relationships
- The Number System
- Expressions & Equations
- Geometry
- Statistics & Probability

+ CCSS: Math 8

- The Number System
 - Irrationals & their approximations
- Expressions & Equations
 - Radicals and exponents
 - Linear equations
- Functions
 - Definition, evaluation & comparison
 - Modeling relationships b't'n quantities

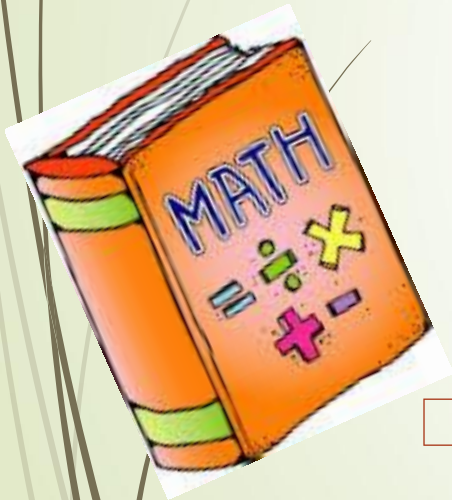
Math 7 = one year of CCSS math
Math 7A = 1.5+ years of CCSS math

The Two Math *Lanes* in Middle School

	Grade-Level Lane	Course Content	Course Content	Acceleration Lane
7th Grade	PAUSD's Math 7 Course	CCSS Math 7	CCSS Math 7 ----- $\frac{3}{5}$ of CCSS Math 8	PAUSD's Math 7A Course
8th Grade	PAUSD's Math 8 Course	CCSS Math 8	$\frac{2}{5}$ of CCSS Math 8 ----- Advanced Algebra	PAUSD's Alg 8 Course
	Pacing description →	Two Years of CCSS Math in Two Years	Three Years of CCSS Math (CCSS Math 7, 8, & Algebra 1) plus Algebra 1 Extensions in Two Years	


Content and Pace

- Students in Math7A will complete **more than 1 ½ years** of material within the year; they will complete **all** of the 7th grade standards AND more than **half** of the 8th grade standards. The material will be taught at an *advanced* level.
- Students in Math 7 will complete **1 year** of material (**all** of the 7th grade standards) at the CCSS-M7 level



Student achievement helps teachers determine a rubric score and a course placement suggestion...





The teacher's criteria for suggested course placement includes student...

- achievement on the first attempt for classroom tests (not retakes)
- achievement on end-of-year exams
- Note: This is a change from prior years which included behavioral information such as homework turn-in, extensions work, projects, and longer challenge problem completion.

Rubric

CRITERIA TABLE: MATH 6 TO SEVENTH-GRADE MATH, BEGINNING 2018-19 (Note: 6 criteria possible)

SIXTH GRADE TEACHER INPUT FOR STUDENTS AND PARENTS/GUARDIANS FOR SEVENTH GRADE MATH COURSE PLACEMENT

Criteria	Math 7A	Math 7
Classroom Unit Tests Average (First score on each unit test) [First scores indicate comfort with the pace of the course.]		
<u>94% to 100% or Rubric Score of Mode 4</u> Will receive an X in the Math 7A column		
<u>90% to 100% or Rubric Score of Mode 3 or above</u> Will receive an X in the Math 7A column		
End of Year Comprehensive Test, Part 1		
92% to 100% Will receive an X in the Math 7A column		
85% to 100% Will receive an X in the Math 7A column		
End of Year Comprehensive Test, Part 2		
92% to 100% Will receive an X in the Math 7A column		
85% to 100% Will receive an X in the Math 7A column		


Note: Students who earn 3 X's in the Math 7 and Math 7A column

- ✓ The student could be a borderline situation.
- ✓ The student may be *more* successful in Math 7... or...
- ✓ The student may enroll in Math 7A, but may need some additional support (extra HW time, time with teacher, etc.)
- ✓ If the student completed multiple retakes, Math 7 may be a better fit
- ✓ If the student completed extension work in class, Math 7A may be a better fit.



Math 7 or Math 7A?

- Some students are not ready for course acceleration in 7th grade.
- There are summer options for those students should they be interested in accelerating at a later date.
- These options are available at the end of 7th, 9th and 11th grades.



If a student earned six **X**s in the **Math 7** column only...


- ...the student may need additional math support in the Math 7 course,
such as extra HW time or additional teacher time.

If a student earned **all Xs** in the **Math 7A column only...**

The student will be given a few screening questions to determine if they should be invited to take the Math 7A Mastery Test.

Students who score well on the screening questions will be invited to take the Math 7A Mastery test.
(Only students who have been studying Math 7A topics should take the test.)

There are **no** opportunities to take the Math 7A Mastery Test *without* **all six Xs** in the Math 7A column.



There are other opportunities for acceleration—wait for the right time:

- Although acceleration is not appropriate for every student, as students grow and change, new capabilities may appear and, in math, students may grow to
 - Show interest to accelerate
 - Embrace challenge
 - Demonstrate mastery of grade-level standards
 - Increase the rate at which new ideas, concepts and skills can be acquired



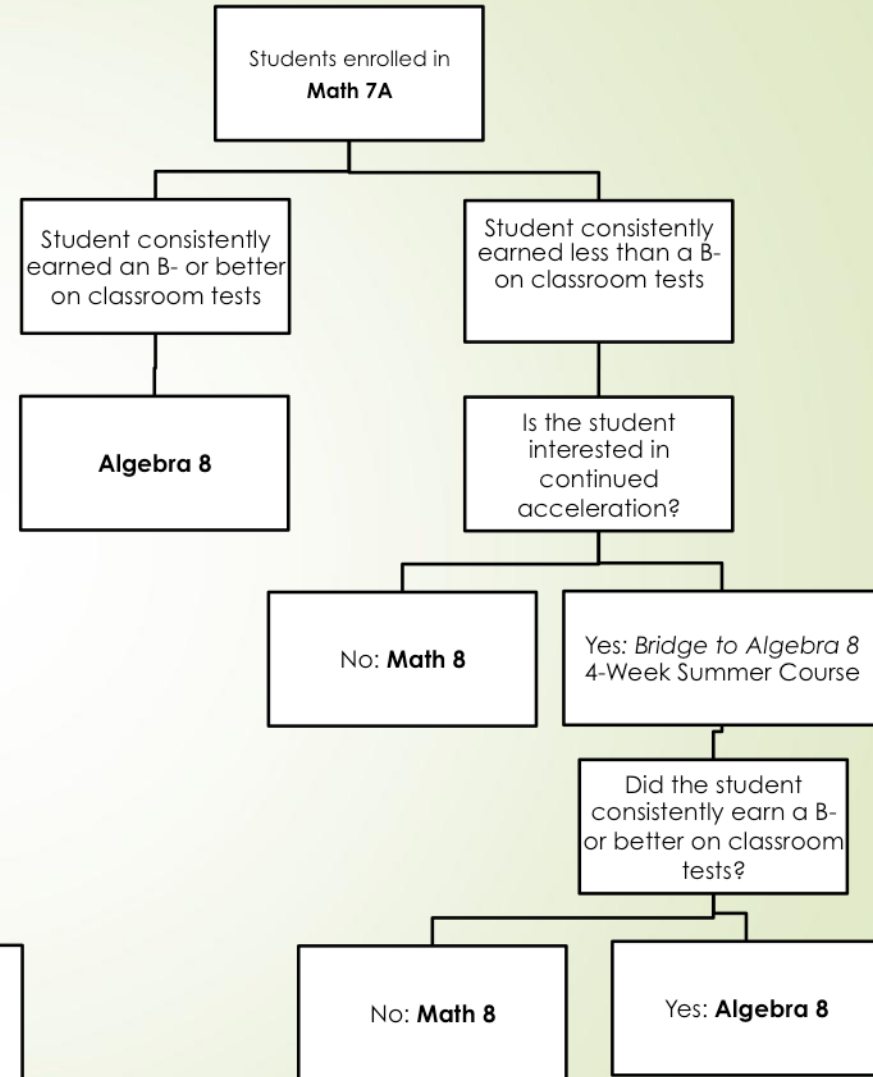
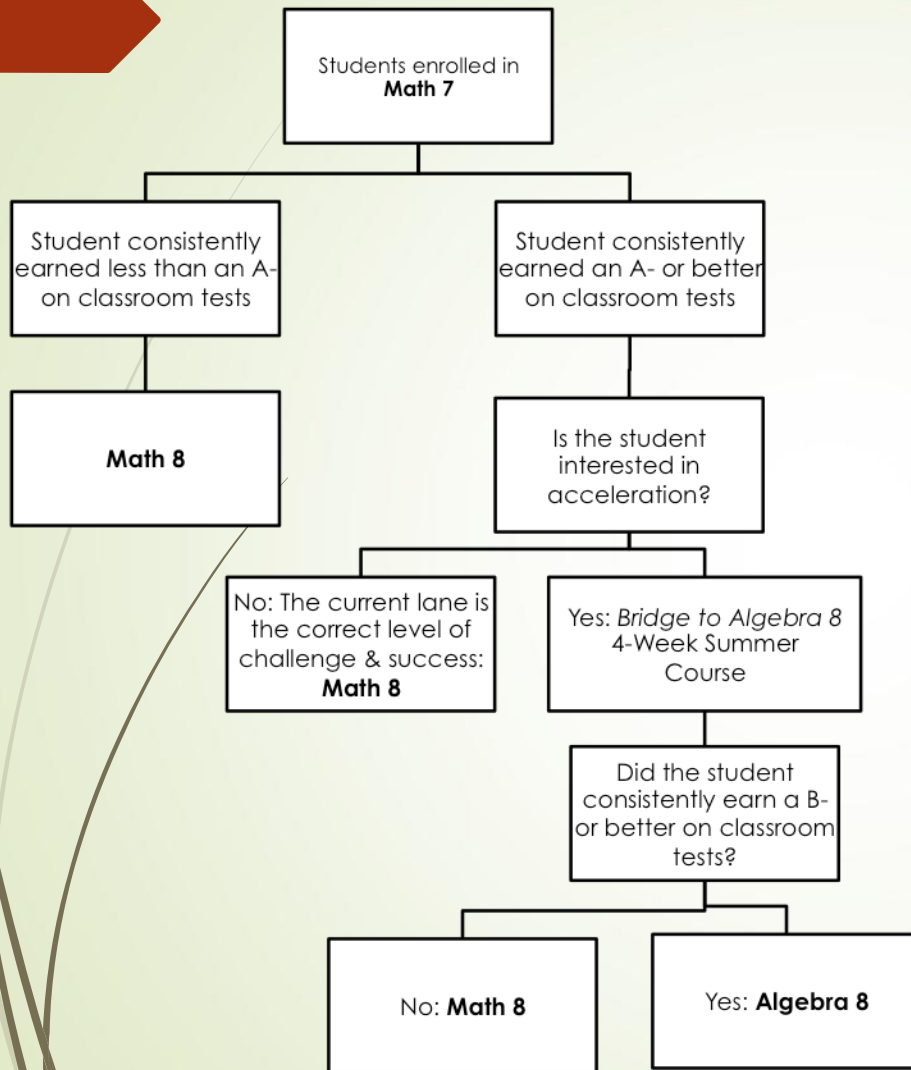
Acceleration opportunities:

- **Between 7th & 8th Grade, after Math 7**
 - Summer Option: Bridge to Alg 8^{See the next slide for details}
- **Between 9th & 10th Grade, after Alg 1A**
 - Summer School: 6-week Geometry A course
- **Between 11th & 12th Grade, after Alg2/Trig A**
 - Summer School: 3-week IAC-Focus-for-Calculus Topics
- **Between 11th & 12th Grade, after Pre-Calc or IAC**
 - Summer School: 3-week Intro to Calc course

Bridging to Algebra 8 After Math 7

Students must:

- ✓ Earn solid **A**s in both semesters in Math 7
- ✓ Take advantage of extension opportunities
- ✓ Demonstrate ease with computation
- ✓ Participate in summer bridge course & earn a B or better



After 8th grade

At the end of 8th grade there are more laning options.

- 8th grade math teachers can suggest a math course for your student upon request.
- For more information, please go to the SB 359 Document or Math Placement Link on the PAUSD Website.

Math Placement/SB 359 [Document](#) Link

Chapter Titles are listed to the right. On the document, click on the title to go to the article.

Grade 5 to Grade 6

Grade 6 to Grade 7

Grade 7 to Grade 8

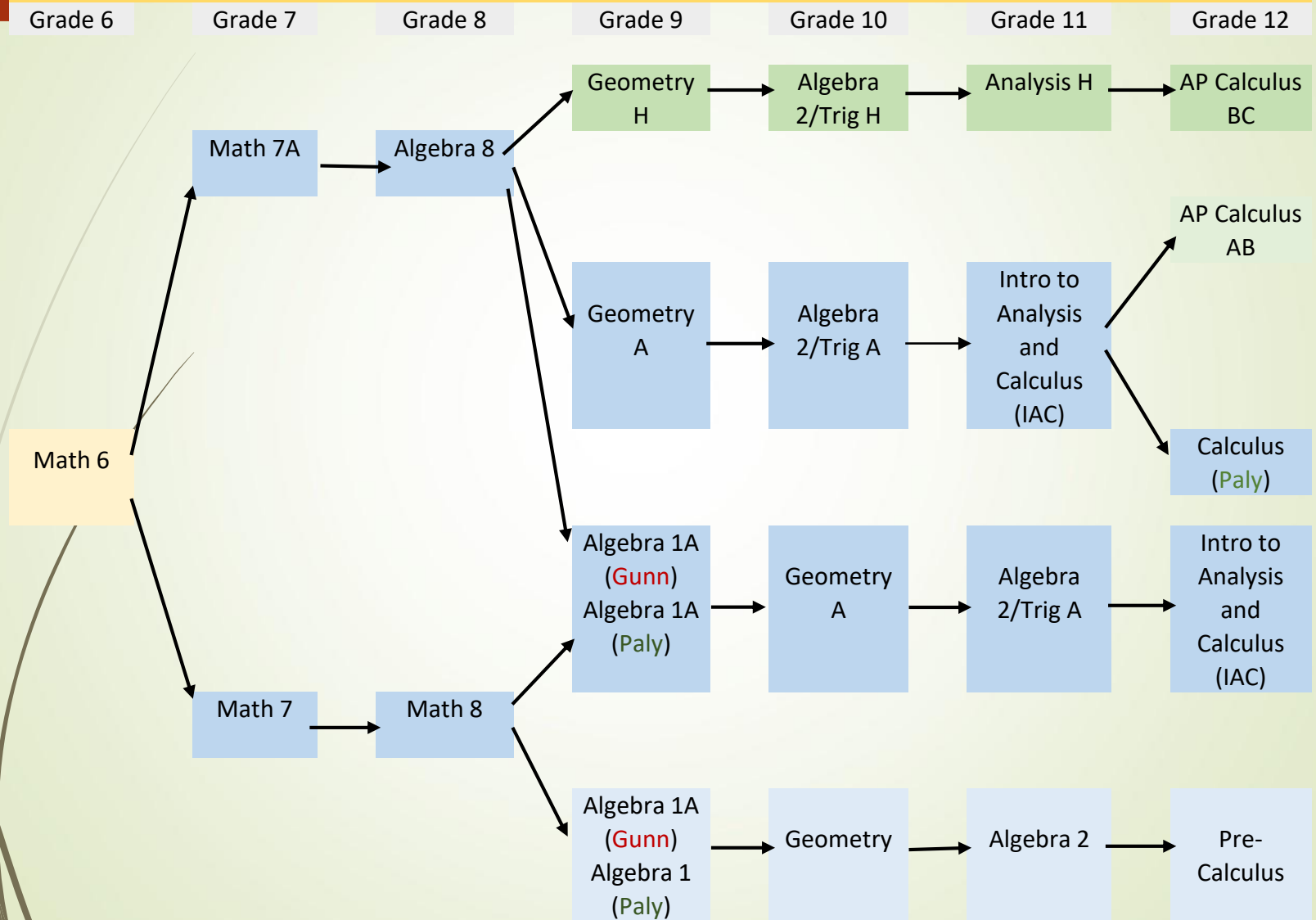
Grade 8 to Grade 9

Offerings from Grade 6 to Grade 12

Frequently Asked Questions (FAQs)

District Flowchart

PAUSD Secondary Math Flow Chart: *Common Pathways*



Considerations

- It is important that a student chooses or is placed appropriately for both **challenge and success** in math courses throughout secondary education, ***which they can largely meet on their own***.
- Building success is a journey, *not* a race. Student success is not only the mastery of content and skills, but includes enthusiasm for math along with a healthy, balanced, and happy life.
- The UC Requirements for Admission (and PAUSD Graduation Requirements) in mathematics is the successful completion of an **Algebra 2 Course**.



Making a good decision...

- What is good for your student?
- Does the student enjoy math?
- Is this course what the student wants?
- Balance the time that must be spent on the work with the student's interest in the course.
- Consider the pacing of the course.
- Know what to expect in the event of a lane change; it may cause a change in schedule.



The Timeline:

- The placement tests will be given to all 6th graders in May.
- Teachers will complete the rubric and contact parents by the end of May.
- Teacher's placement-suggestion letters will be mailed to parents.
- The invitation for the screener for the Math 7A Mastery Test will be given in Late May and results reported by June.

In the meantime,



- Continue to encourage your student to do the very best work in math every single day!
- Contact your student's math teacher if you have any questions about this process.
- Have your student request help or more challenge when needed.



- Thank you for coming tonight!



Want more information?
Interested in more details about 6-12
math?

District Office Math Information
Nights (25 Churchill)

Wed, Oct 10 (7-8:30)

Wed, Jan 16 (7-8:30)

Format: 30 minute presentation followed by
a question-answer period

Spanish and Mandarin Interpreters will be
available