



# Advanced Mathematics Program Parent Meeting

August 3, 2022



## School Site Council - LCAP Goal - Meeting the Needs of our Advanced Learners

- SSC Members took on this goal this year
- We explored the following inquiry questions:
  - How many students typically qualify for the program under the current criteria?
  - Are students allowed into the program who are on the cusp of getting in? Are they successful in the program long term?
  - Are families leaving our district due to not having advanced programs for our students, particularly in middle school?
  - Are we able to provide an Honors program in addition to the Advanced Math Program for students who don't get into the program?
    - High achieving or just willing to work hard?
    - Would there be a minimum grade point average that would need to be maintained?



# Philosophy of the Advanced Math Program

- Elementary school is the place to spend time on important foundational skills, e.g. number concepts, that are necessary for all other mathematics. Time to explore the mathematics and practice is important and valuable for all kids.
- We have a range of students in every classroom. We are able to meet the needs of most students by differentiating the instruction, e.g. giving students more complex problems to solve. If children are appropriately challenged, their academic needs are being met.
- The Advanced Mathematics program began as a way to challenge the outliers - those students who need more of a challenge than we can provide in the math classroom. They are divergent thinkers, and make connections between concepts and between problems that are unique and innovative.
- We determined five criteria as a way to determine if the students are outside of the range of what we would expect in the math classroom.



# Criteria for Advanced Math

## Elementary School:

- iReady scores in the 95th percentile – standards-based test, measures proficiency on standards
- SBAC scores for students in 3rd grade and beyond (Must have all 4's – exceed the standards)
- District Benchmark Assessment: 90%
- Exemplar: 3.0 – 4.0 (Proficient-Advanced)
- Report card/Classroom performance: 4's on report card; classroom work shows higher level thinking throughout the year

## Middle School:

- 85% or higher on placement test (testing a year above grade level content)



# Current Advanced Math Program Design

- Accelerated curriculum, application level, complex problems
- Supplants the regular program
  - Advanced 3rd - Third grade curriculum
  - Advanced 4th - Fourth grade curriculum with some fifth grade content
  - Advanced 5th - Sixth grade curriculum with some fifth grade content
  - Advanced 6th - Seventh grade curriculum
  - Advanced 7th - Eighth grade curriculum
  - Advanced 8th - **Integrated Math I Honors (11 units)**

## Student Data - 21-22 School Year

### Current Third Grade (9) Grade (17)

Number of students in the class:	9
Number of Students who took assessments	57
Number of students who qualified by meeting all 4 criteria (No SBAC scores)	5
Number of students who were close/on the cusp	5
Number of students who did not meet more than 2 of the criteria	47

### Current Fourth Grade (14)

Number of students at the end of third grade	9
Number of Students who tested coming into 4th grade year +New students by parent request	20
Number of students who qualified by meeting all 5 criteria	3
Number of students who were close/on the cusp	4
Number of students who did not meet more than 2 of the criteria	13

### Current Fifth

Number of students at the end of fourth grade	12
Number of Students who tested coming into 5th grade year +New students by parent request	18
Number of students who qualified by meeting all 5 criteria	5
Number of students who were close/on the cusp	4
Number of students who did not meet more than 2 of the criteria	9

## Math SBAC Scores from 20–21 School Year

Third Grade	Below Standard	Near/At Standard	Proficient	Advanced	Percent Proficient and Advanced
<b>Math (66)</b>	<b>2% (2)</b>	<b>6% (4)</b>	<b>27% (18)</b>	<b>65% (43)</b>	<b>92% (61)</b>

Fourth Grade	Below Standard	Near/At Standard	Proficient	Advanced	Percent Proficient and Advanced
<b>Math (59)</b>	<b>7% (4)</b>	<b>8% (5)</b>	<b>22% (13)</b>	<b>63% (37)</b>	<b>85% (50)</b>

Fifth Grade	Below Standard	Near/At Standard	Proficient	Advanced	Percent Proficient and Advanced
<b>Math (69)</b>	<b>12% (8)</b>	<b>10% (7)</b>	<b>22% (15)</b>	<b>57% (39)</b>	<b>78% (54)</b>

Sixth Grade	Below Standard	Near/At Standard	Proficient	Advanced	Percent Proficient and Advanced
<b>Math (72)</b>	<b>4% (3)</b>	<b>14% (10)</b>	<b>22% (16)</b>	<b>60% (43)</b>	<b>82% (59)</b>

Seventh Grade	Below Standard	Near/At Standard	Proficient	Advanced	Percent Proficient and Advanced
<b>Math (65)</b>	<b>5% (3)</b>	<b>20% (13)</b>	<b>25% (16)</b>	<b>51% (33)</b>	<b>75% (49)</b>



## Math iReady Data

<b>Grade Level</b>	<b>85th-90th Percentile</b>	<b>90th-95th Percentile</b>	<b>95th-99th Percentile</b>	<b>Number of Students Tested</b>
3	3 students (5%)	6 students (9%)	16 students (25%)	64
4	3 students (4%)	10 students (12%)	22 students (27%)	82
5	4 students (5%)	8 students (11%)	20 students (27%)	74
6	6 students (8%)	5 students (7%)	19 students (25%)	75
7	5 students (6%)	8 students (10%)	20 students (25%)	79
8	9 students (11%)	9 students (11%)	17 students (22%)	77



# Teacher Input: Advanced Mathematics

## Middle School:

- Teachers feel we are meeting the needs of all of our students. If they work with students who are working well beyond grade level expectation, they have worked together to move the student into the Advanced Math placement. This has been done informally.
- They are differentiating within the grade level math and advanced math programs.
- They do not feel that an honors program would be appropriate based on our student population. They feel that all of the classes have such a high number of high performing students that they base instruction on a high level of proficiency and provide much opportunity to exceed standards.



# How Other Elementary Schools/Middle Schools Provide Advanced Mathematics Programs

## Elementary Schools (Cardiff, Carlsbad, Del Mar, Encinitas, Solana Beach):

No advanced programs in mathematics; differentiation in the classroom to meet the needs of their learners

## Middle Schools (Carlsbad, San Dieguito, Privates):

Carlsbad: Three levels - Support, General Education, Advanced

San Dieguito (7th and 8th grade only): Three levels of mathematics - Essentials, College Prep, Honors (Also a grade skip)

The Bishop's School - Middle School - Math, Math Enriched 1, 2, 3

Pacific Ridge School - Middle School - Courses with both regular and honors sections at each grade level



# Information from Parent Interviews

## Students leaving for Sixth Grade (13):

- Student really wants to push himself/herself; our middle school needs some work - needs more challenge (3)
- Looking for more differentiation in the classroom; personal attention; better classroom management (2)
- Moving (1)
- Difficult to get in at the high school level - only 10% of students accepted at the high school level, 40% at the middle school level (2)
- Shy student; needs more time to adjust to new environment, want him/her to have more time there before high school (1)
- Older sibling is already at the other school; need calendars to match up (3)
- Unhappy with school (1)

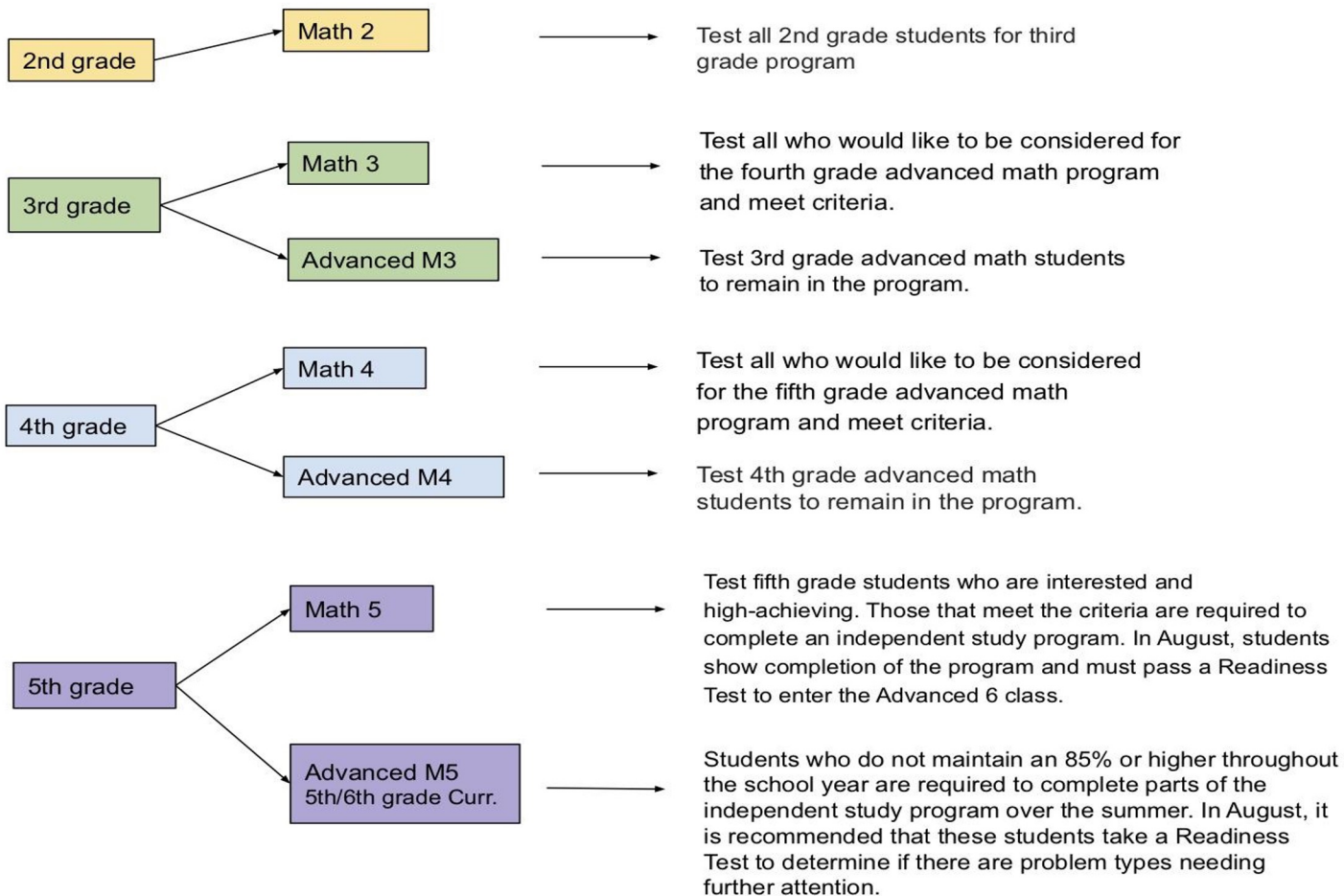
## Students leaving for Seventh Grade (7):

- Older sibling is already at the other school; need calendars to match up
- Wants experiential learning like the Harkness model
- Social difficulties at school
- Religious school preference
- Difficult to get in at the high school level - only 10% of students accepted at the high school level, 40% at the middle school level (2)

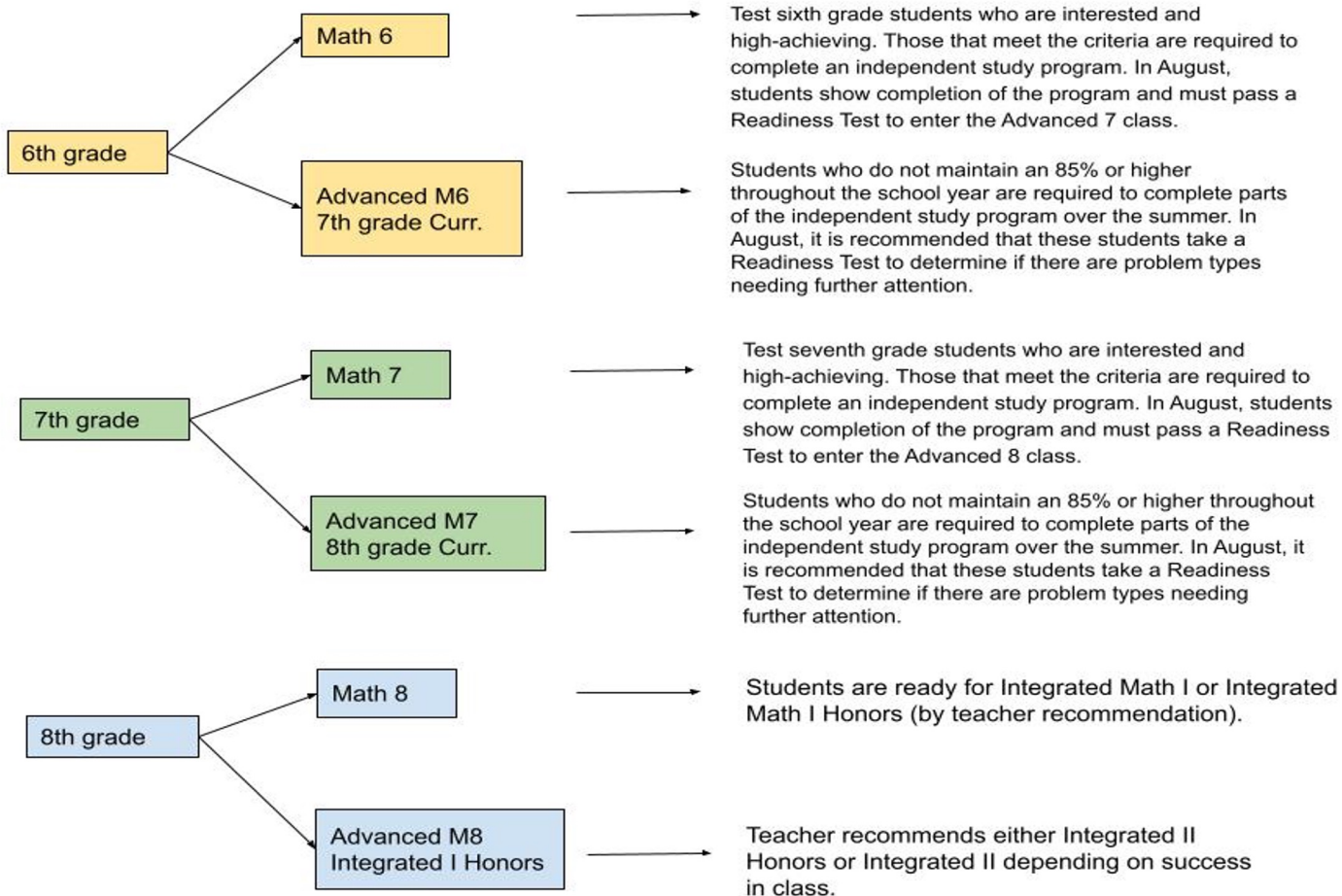
# Summary for Middle School:

- **Other middle schools have different ways to compact their programs. Because we are K-8 and can work with fifth graders at the middle school level, our middle school teachers feel that providing a combination of 5th and 6th grade skills is the right way to combine the curriculum. They believe it has been very successful at 5th grade, and that the students will be more prepared for IM1 as a result. We will know more as we monitor student progress next year as the current eighth grade class was the first year of the skip at fifth.**
- **We need to do the IM1 Honors course (eleven units), because our families would like their children to be prepared for the IM2 Honors level in San Dieguito schools.**
- **In San Dieguito middle schools, there is an honors class where high achieving students are placed. There is criteria for the program, but students are allowed in by parent request if they don't make the criteria. They must maintain a certain grade average to remain in the program. If a parent requests grade advancement, students take an assessment and must meet strict criteria for the grade skip. If students skip a grade, they take the next grade level class (A seventh grader would take an eighth grade class.)**

## 2022/2023 RSFSD Elementary Math Pathways



## 2022/2023 RSFSD Middle School Math Pathways



## Student Data

### Incoming Sixth Grade

<b>Grade</b>	
Number of students in AM in fifth grade:	17
Number of Students whose parents requested assessments	12
Number of students who had high grades throughout the previous school year (All 4's)	6
Number of students who passed the assessment and were initially offered the summer bridge	2
Number of students currently taking the summer bridge	6

### Incoming Seventh Grade

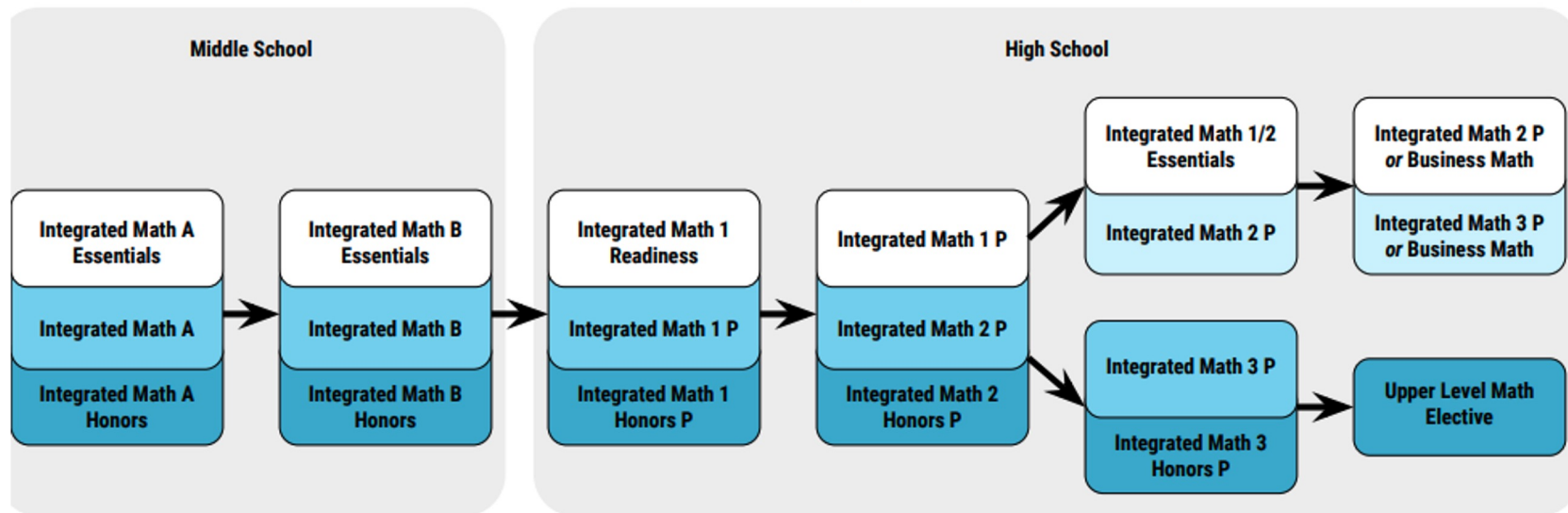
Number of students in AM in sixth grade:	15
Number of Students whose parents requested assessments (does not include new student requests)	10
Number of students who had high grades throughout the previous school year (A or A+)	4
Number of students who passed the assessment	4
Number of students currently taking the summer bridge	8

### Incoming Eighth

Number of students in AM seventh grade:	16
Number of Students whose parents requested assessments (does not include new student requests)	11
Number of students who had high grades throughout the previous school year	9
Number of students who passed the assessment	1
Number of students currently taking the summer bridge	7



# SDUHSD Math Pathway and Placement

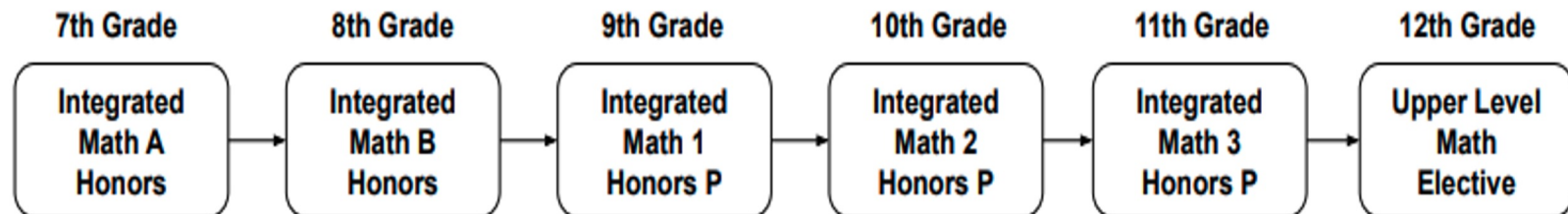


## Optional Course Level Change

The following level changes require students to complete additional coursework and pass an exam prior to the next course.

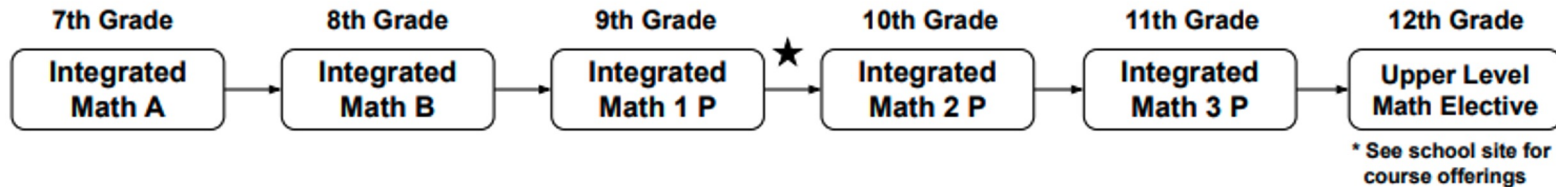
- Integrated Math A Essentials level change to Integrated Math B
- Integrated Math B Essentials level change to Integrated Math 1 P
- Integrated Math 1 P level change to Integrated Math 2 Honors P
- Integrated Math 2 P level change to Integrated Math 3 Honors P
- Integrated Math 3 P level change to AP Calculus AB

## SDUHSD Math Placement and Course Pathway - Honors Classes

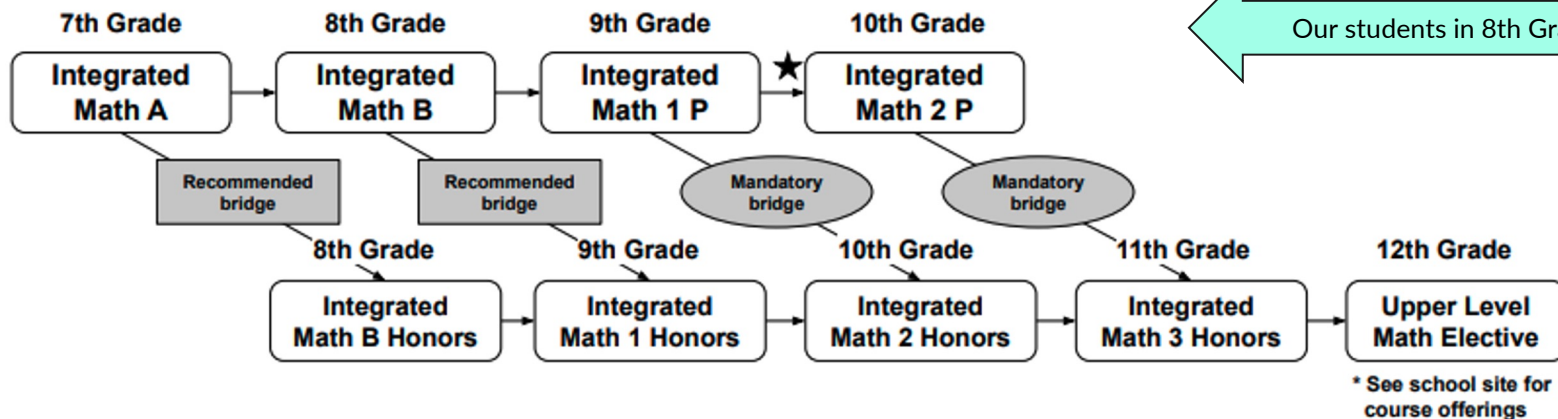


\* See school site for course offerings

## SDUHSD Math Placement and Course Pathway



## Course Pathway (with Optional Bridge to Honors)





# Professional Recommendation: Middle School Advanced Math

- We will select an alternative test to demonstrate proficiency at the end of the pathway.
- We have committed to more professional development for teachers on differentiating to meet the needs of students who work at an advanced level 6-8.
- We will make the work of differentiation transparent to parents - share how students are being challenged within their math classrooms.
- Work with middle school math teachers to determine whether an honors track within math classrooms can be formalized for either the second semester of this year or next school year.
- Determine future criteria for placement into Advanced Math at each grade level.
- Ensure that we communicate the criteria for the program and the pathways at the beginning of the school year.
- Analyze student data to determine whether the bridge program was successful.
- Determine whether students need to maintain a certain grade point average/level of competency to stay in the program.

Feedback or Questions?