

Mathematics Review - Summary of Outcomes

Since September, this review is being conducted by a Mathematics Focus Group, composed of key teachers from both Primary and Secondary, curriculum coordinators, Head of Curriculum and Professional Development and the Headmaster. They have undertaken an analysis of the current Mathematics curriculum and researched other curricula/resources/programs from around the world. All recommendations have been submitted to the Academic Council for review before implementation of any initiatives.

Primary School

- Little high quality evidence of positive effects of any particular program on students' achievement. There will not be a single prescribed text book; rather, teachers will use those resources which best meet the needs of students in acquiring the learning outcomes.
- Supplemental computer-assisted instruction was deemed to have positive effects on computation.
- Differentiated classroom instructional strategies will have the strongest impact on student achievement. Hence, this aspect has become the primary focal point for discussion and development.
- There will be an agreed and common set of algorithms that will be developed within and across the grades and languages.
- The Math scope and sequence documents are being re-written with defined expectations across the languages; reaching agreement on the timing of the introduction of key concepts; discussing ways to strengthen Math facts; considering strategies for mental and computational Mathematics.
- There will be increased use of summative assessments for every grade that allow both teachers and parents to have a clearer understanding of a student's achievement level as compared to a set of defined and expected outcomes.
- We will pilot the 'First in Math' program to give parents and students access to an online program for skill development in the basic skills from grades 1 to 5.
- Teachers in grades 5 and 6 will meet to discuss the transition into Middle School as it applies to Mathematics

Secondary School

- There will be a published set of criteria by which students from grade 7 will be grouped. This has been published in the Parent-Student Handbook
- An accelerated Math group has been introduced for grade 9 for those students at the highest Math level in order to prepare them better for the High Level IBDP course.
- SAT Math prep will continue in grades 9 and 10. MYP emphasizes knowledge and understanding, communicating mathematically, investigating patterns and reflection and transitions into diploma level mathematics. We also have online support for SAT thanks to the SAT online course and First In Math, which has been introduced in Grades 6-9 to help students increase their mathematics skills as well as for standardized test preparation.
- The majority of our Mathematics teachers have been trained as IB examiners or present IB workshops. All have been trained as IB Mathematics teachers.
- The Grade 6-10 Math books are specifically written for MYP and 11-12 for diploma level Mathematics. Our 9-12 books are *Haese and Harris. We (AIS) collaborated with H&H in their production.*
- SmartBoard computers are equipped with software for graphing, geometry, calculator use and symbolic algebraic manipulation
- AIS students have achieved notable performances in all of Mathcounts, the American Mathematics Competition, the Purple Comet Math Contest, the GA Tech HS Mathematics competition and the ISMTF contest.