2021 ACADEMY SUMMER MATHEMATICS RECOMMENDATIONS

Dear Parent or Guardian,

Below you will find some recommended activities and material for your child. Completion of these activities is optional and aim to help students review, enrich, have fun and change their mindset in Mathematics.

Option A: Online Mathematics practice

Complete one lesson, or appropriate math game, daily (for 10-15 minutes) for a total of 25 days this summer. You may want to remind your child to keep a calendar or assignment log to keep track of work completed.

- Khan Academy (organized by course or math topic)
- Ipracticemath.com (organized by grade level)
- IXL (organized by grade level)
- Cool Math (organized by grade level)

Option B: Reading and Mathematics - recommended books

Students may also spend time reading interesting books appropriate for their age level. You will find below a list of recommended books by age level composed by nrich.org

Summer Reading for Mathematics Grades 9-12

Recommended Reading List Cambridge Mathematics Faculty

<u>Mathematics Reading List Cambridge</u>

Option C: Recommended online courses

Here are some courses that are recommended for mathematics learners.

• ACS Athens Extended Learning Summer Programs (enrollment fee)

A pioneer in online learning among K-12 institutions, ACS Athens innovates once again by introducing the all-new Summer Programs. With courses including preparation and revision for IB students, English Language Acquisition (ELA) for non-native speakers, and more, students attending the Summer Learning Programs will develop new skills and improve their efficiency. Learning never stops at ACS Athens!

• How to learn Mathematics Online Stanford (Free)

How to Learn Math is a class for learners of all levels of mathematics. It combines really important information on the brain and learning with new evidence on the best ways to approach and learn math effectively. Many people have had negative experiences with math, and end up disliking math or failing. This class will give learners of math the information they need to become powerful math learners, it will correct any misconceptions they have about what math is, and it will teach them about their own potential to succeed and the strategies needed to approach math effectively. If you have had past negative experiences with math this will help change your relationship to one that is positive and powerful.

Art of problem solving Online Courses for Basic, Intermediate and Advanced
 Mathematics (with enrollment fee)

AoPS Online courses take place weekly. Expert instructors lead cohorts through engaging and rigorous challenges, and students work with peers to creatively problem solve together.

Option D: Practice Material for printing

Below you will find some problems and practice with solutions for preparing students for entering their Fall course.

- Entering Grade 9 Algebra 1 Review
- Entering Grade 10
- Exiting Algebra 2 and Trigonometry
- Exiting Algebra 2 and Trigonometry Honors

Note: All IB courses from year 1 to year 2 have assignments for printing posted under the IB Summer Assignments page.