

# Waring School

## Math Department Placement Process

There are many factors for success in middle and secondary school mathematics, including quantitative skills acquisition and development, but also an understanding of core concepts at increasing levels of abstraction. Research over the last couple of decades has improved our understanding that learning math concepts depends on cognitive maturity, which is a function of brain development and maturation, not intelligence. At Waring we engage in a thoughtful process of placement and course development that seeks to meet our students where they are at, while also providing rigor and preparation for future work in quantitative disciplines.

Throughout the year, our teachers work closely with students within and outside of class to help them learn. We write narrative evaluations, offer summary assessments in the form of projects and tests, and also do ongoing formative assessments (such as homework, notebook review, in-class activities and group work, class discussion and reflection, and/or portfolio work). As we build class sections for the following year, the department chair solicits feedback in the form of written recommendations from classroom teachers and, perhaps, the results of a diagnostic test. We then gather this data, and combine it with our anecdotal evidence of success and struggles and a student's work habits, through extensive discussion as a department. At times, course content may be re-designed and prerequisites outlined, based upon student needs. Finally sections are built in collaboration with the French department. Students in Groups 1 - 5 are notified of their math section in the first week of school.

Sectioning for our Core Math program is grade specific. Core Math 6 and Core Math 7 together build a bridge from Arithmetic to Algebra for our students. The goals of Core Math are to build each student's confidence as a learner of mathematics, to develop skills, to strengthen persistence and flexibility in problem solving, and always to foster a growth mindset. Students will move on to a course in Algebra in Group 1 upon successful completion of Core Math program.

Students arrive at our school with varied degrees of exposure to math content or cognitive maturity. While we do our best to initially place a student appropriately, occasionally it may be necessary to adjust a student's path through our program to meet their academic needs or goals. In such a case, a student should contact the classroom teacher and department chair to begin a placement review.