Bay Shore Middle School's mathematics curriculum reflects a balanced approach to developing students' conceptual understanding, computational proficiency, and problem-solving skills. Students entering sixth grade have a wide range of mathematical reasoning skills and knowledge; therefore, offering appropriate math experiences are crucial as students move through the progression of concepts leading to high school mathematics. Bay Shore Middle School's goal is for all students to become proficient with math concepts and practices to ensure college and career readiness.

In an effort to place each student in the sixth grade math course that will offer the appropriate level of challenge, Bay Shore Middle School offers two pathways: a *Traditional Pathway* and an *Accelerated Pathway*.

1. The *Traditional Pathway* progresses through grade level *Common Core* math concepts at an appropriate pace. Students moving along this pathway are projected to take the *Common Core Algebra Regents* in grade 9.

2. The *Accelerated Pathway* exposes students to concepts at a faster pace and content is above grade-level of the *Traditional Pathway*. The *Accelerated Pathway* typically leads students to take the *Common Core Algebra Regents* in grade 8 and *Advanced Placement (AP*) and *International Baccalaureate (IB)* course work in grades 11 and 12 at Bay Shore High School.

Sixth Grade Accelerated Math is the first course in the accelerated mathematics pathway. Students should be prepared to move through and apply concepts at a rapid pace. To prepare students for *Common Core Algebra* in eighth grade, Bay Shore Middle School has developed a sequence of compacted courses. The term *"compacted"* means to compress content, which requires a faster pace to complete, as opposed to skipping content. To prepare students for *Common Core Algebra* in grade eight, Bay Shore Middle School will compact the math curricula

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	Math 12 *IB Math Studies*	*AP CALC BC* *IB Math HL* *AP CALC AB* *IB Math SL* *AP Statistics* *IB Math Studies* *Intro to Calculus*
	CC Algebra II	*AP CALC AB* *IB Math SL* *AP Statistics* *IB Math Studies* *Pre-CALC 300*
	CC Geometry	*CC Algebra II*
	CC Algebra	*CC Geometry*
	Math in Focus 8	*CC Algebra*
	Math in Focus 7	*Math in Focus 7/8*
	Math in Focus 6	*Math in Focus 6/7*

_____ (2016-2017)

The criteria for entrance into *Sixth Grade Accelerated Mathematics*, as recommended by the *Bay Shore Middle School Acceleration Committee*, are designed to identify high achieving and highly motivated mathematics students. The selection process uses two methods to identify students. Students meeting either *Criteria 1* or *Criteria 2* will be eligible for *Sixth Grade Accelerated Mathematics.*

Students who have demonstrated readiness for high school level mathematics in middle school will take the *Common Core Algebra* course in grade 8. To prepare students for high school mathematics in eighth grade, Bay Shore Middle School has developed a sequence of compacted courses. The term "compacted" means to compress content, which requires a faster pace to complete, as opposed to skipping content. Upon successful completion of *Common Core Algebra* in grade 8, students will be ready for *Common Core Geometry* in grade 9.

1. *It is recommended to compact three years of material into two years, rather than compacting two years into one. The rationale is that mathematical concepts are likely to be omitted when trying to squeeze two years of material into one. This is to be avoided, as the standards have been carefully developed to define clear learning progressions through the major mathematical domains. Moreover, the compacted courses should not sacrifice attention to the Common Core Math Standards.*

2. *Research has shown academic discrepancies in the placement of students into accelerated classes at the middle school level. While such decisions to accelerate are almost always a joint decision between the school and the family, serious efforts must be made to consider solid evidence of student learning in order to avoid unwittingly disadvantaging the opportunities of students.*

3. *Traditionally, students taking high school mathematics in the eighth grade are expected to take Pre-calculus in their junior years and then Calculus in their senior years. This is a good and worthy goal, but it should not be the only option for students. Advanced courses could also include AP Statistics, IB Mathematics, or College Math. An array of challenging options will keep mathematics relevant for students, and give them a new set of tools for college and/or career readiness.*

Just as care should be taken not to rush the decision to accelerate students, care should also be taken to provide more than one opportunity for acceleration. Some students may not have the preparation to enter an *Accelerated Pathway* in middle school, but may still develop an interest in taking advanced mathematics, such as *AP Calculus, AP Statistics or IB Mathematics* in their junior or senior year. Additional opportunities for acceleration may include allowing students to take two mathematics courses simultaneously such as *AP Statistics and Pre-calculus.*


A Visual Representation of the Range and Complexity of th
Existing Mathematics Core Compared to the Common Core
A Shift: