

Content Area: Math		
Course Title- Algebra		
Grade Level: see below	Credits:1	Pre-requisites: see below
<p>Course Description: (Must have 80% or above average in Math 8 OR 92% or above average in Math 7 or accelerated Math 8 and dept. invitation) This is a one year course for one high school math credit designed to prepare students for the NYS regents exam in algebra in June of their Freshman year (8th grade if accelerated). Topics covered in the course include but are not limited to: real numbers, polynomials, solving and graphing linear equations and inequalities, factoring, algebraic fractions, non-linear functions, radicals, right triangles, plane and solid geometry, set theory, probability, and statistics. Students who start this course at the beginning of their Freshman year are expected to complete 4 years (4 credits) of high school math. The NYS minimum for graduation is 3 credits. Accelerated students who start Algebra in 8th grade are expected to complete 5 years of high school math.</p>		

Content Area: Math		
Course Title- Algebra I		
Grade Level: see below	Credits:1	Pre-requisites: see below
<p>Course Description: First year of a 2 year course which follows the NYS core curriculum for Integrated Algebra. Students are prepared to take the NYS Regents Exam in Integrated Algebra at the end of their Sophomore year after successful completion of both Algebra I and Algebra II courses. This would result in gaining 2 of the 3 high school math credits toward graduation. The Algebra I course includes topics in integers, addition, subtraction, multiplication, and division of equations, proportions, probability, functions, linear equations and their graphs, powers and roots. There is a comprehensive final exam which covers the first 8 chapters of Glencoe's <u>Algebra Concepts and Applications</u> text book. Algebra I is the first year of Westport Central School's 4 year high school math "Graduation Program" (4 credits) designed to meet NYS's graduation requirements for mathematics. This program is for students who need a slower pace in math for a better understanding. This program is not designed to prepare students for college level mathematics such as pre-calculus or calculus.</p>		

Content Area: Math		
Course Title- Applied Math		
Grade Level: see below	Credits:1	Pre-requisites: see below
<p>Course Description: (Must pass Algebra II and the NYS Regents exam in Integrated Algebra) Applied math is part of Westport Central School's High School Math "Graduation Program" and gives students 1 high school math credit. This course takes various math concepts previously learned and has students apply these concepts to real world situations and simulations. The student should expect to do more hands-on work in math and less text book math than in the typical math courses offered in high school. For further understanding of the topics covered, please see Mrs. Phillips, the course instructor.</p>		

Content Area: Math		
Course Title- Geometry NR		
Grade Level: see below	Credits:1	Pre-requisites: see below
<p>Course Description: (Must pass Algebra I & II and the NYS Regents exam in Integrated Algebra) This course is for students who struggle to maintain the pace needed in a regents geometry course. It will give students either a required 3rd credit in high school math or a 4th credit if the student takes it after passing the "Applied Math" course offered. This course will cover many of the same topics as regents geometry, but with little emphasis on "proofs" and more emphasis on applying geometry definitions and theorems to two dimensional diagram problems. This elective course is highly recommended prior to graduation to give a well-rounded understanding of introductory mathematics in both Algebra and Geometry.</p>		

Content Area: Math		
Course Title- Geometry		
Grade Level: see below	Credits:1	Pre-requisites: see below
<p>Course Description: (Must pass Algebra and the NYS regents exam in Integrated Algebra) This course follows the NYS Core Curriculum for Geometry which can be found on-line. The course covers all topics in AMSCO's Geometry textbook with many additional teacher made supplements. Tests include 3 or 4 rigorous chapter tests per quarter as well as a required comprehensive regents exam as a final exam grade. This course is not intended for students who barely passed the Algebra regents since its content and difficulty is a step up from that course.</p>		

Content Area: Math		
Course Title- Algebra 2 and Trigonometry		
Grade Level: see below	Credits:1	Pre-requisites: see below
<p>Course Description: (Must pass Algebra and Geometry and the NYS Regents Exams in both courses) This course follows the NYS Core Curriculum and prepares the student for the NYS Regents exam in Algebra 2 and Trigonometry in June which counts as the final exam. Students will build on and extend their knowledge of algebraic topics as well as study the mathematical properties of triangles along with their applications. This course and regents is typically offered to only very seriously motivated math students who have demonstrated success in the prerequisite math courses and their regents exams. The pace and rigor of this course represents the most challenging math education experience Westport Central School has to offer. Success in this course and on the regents prepares students to further their mathematical education at both the high school and college level.</p>		

Content Area: Math		
Course Title- Pre-Calculus		
Grade Level: see below	Credits:1	Pre-requisites: see below
<p>Course Description: Topics will include linear, quadratic, and polynomial functions; inequalities in one and two variables; exponents and logarithms; analytic geometry; and extensions of topics in trigonometry. Graphing various types of functions both manually and with graphing calculators will be covered. There is a comprehensive final exam but no regents exams for this course. This course is intended to prepare accelerated math students for Westport's high school Calculus course and Seniors for Calculus I at the college level.</p>		

Content Area: Math		
Course Title- Calculus		
Grade Level: see below	Credits:1	Pre-requisites: see below
<p>Course Description: (Must pass pre-calculus) This course will include most all of the topics found in a typical first semester college calculus course and some of the topics found in a typical second semester college calculus course. Although the rigor of the course will be close to that of a college level calculus course, the pace will be a little slower to generate better understanding of the curriculum by the students. This course is not an AP course. It is for high school credit not college credit. Individual arrangements between student and instructor can be made to make it possible for preparing for the Advanced Placement Exam if the student desires and if the instructor feels the student is capable. This would require a considerable amount of independent learning in addition to the normal class curriculum.</p>		