

PEARL RIVER SCHOOL DISTRICT

Secondary Math- Year-at-a-Glance

	September	October	November	December	January	February	March	April	May	June	Assessment
Grade 8	Real Number System Expressions and Exponents & operations with Scientific Notation Equations (one variable) Linear Equations		Solving Systems of Equations Functions Angle Relationships		Transformations Volume & its' applications Statistics		Pythagorean Theorem Polynomials Factoring		Local Assessment New York State Exam		
CC Algebra CC Algebra 8 CC Algebra H	Algebraic and Linear Equations Functions Linear Relationships		Understanding and Applying Linear Relationships Applications of Systems of Equations and Inequalities Introduction to Parent Functions		Polynomials and Factoring Radicals Graphing, Analyzing and Applying Quadratic Functions		Graphing and Analyzing Parent Functions Statistics		Regents		
Foundations of Algebra	Building Blocks of Algebra Algebraic Equations Inequalities Functions		Linear Functions Understanding and Applying Linear Relationships		Linear Inequalities Systems of Equations/Inequalities Sequences Exponential Functions		Factoring Quadratic Functions Quadratic Equations Statistics		Local Assessment		
CC Geometry	Constructions Basic Geometry Concepts Points of Concurrency Congruence Proofs		Transformations Lines and Circles Equations Quadrilaterals		Quadrilateral Proofs Coordinate Geometry Similarity Trigonometry		Trigonometry Circle Theorems Solid Geometry		Regents		
CC Geometry H	Constructions Basic Geometry Concepts Centers of Triangle Congruence Proofs		Transformations Lines, Circles, Parabolas Quadrilaterals		Quadrilateral Proofs Coordinate Geometry Similarity Trigonometry		Trigonometry Circle Theorems Solid Geometry		Regents		
CC Algebra 2	Equations and Factoring Rational Expressions Functions Linear Modeling and Systems		Exponential Functions Logarithmic Functions Quadratic Functions Sequences and Series		Radicals Complex Numbers Trigonometry Polynomials		Probability Statistics Regents Review		Regents		
CC Algebra 2 H	Equations and Factoring Rational Expressions Functions Linear Modeling and Systems		Exponential Functions Logarithmic Functions Quadratic Functions Sequences and Series		Radicals Complex Numbers Trigonometry Polynomials		Probability Statistics Regents Review		Regents		

Math Analysis	Factoring Solving Quadratic Equations (factoring, quadratic formula, completing the square, word problems) Rational Expressions	Complex Numbers Functions Phase Shifts Sequences and Series	Exponential Functions Log Functions Basics of Trigonometry	Trigonometric Graphs Probability Statistics	Local Assessment
Business Math	College Algebra and Algebra Review	Gross Pay Net Pay	Bank Accounts Basic Loans	Owning a Home Purchasing a Car	Local Assessment
Intro to Calculus	Equations and Higher Order Factoring Complex Numbers and Quadratics Polynomial Functions	Analytic Geometry Inequalities Matrices Exponential and Log Functions	Rational Functions Limits Derivatives	Trigonometry	Local Assessment
Calculus	Pre-calculus topics including: equations of lines, systems of equations, functions, trigonometry piecewise functions, synthetic division  Limits: finding from graphs and algebraically. Squeeze theorem.	Continuity: identifying discontinuities (holes and asymptotes) graphically and algebraically: Derivatives as an instantaneous rate of change. computing with limit formula, differentiation rules (product, quotient, chain, implicit)	Applications of derivatives including; writing equations of tangent lines, related rates, interpreting graphs of derivatives extrema, optimization problems	Integration, u-substitution, definite integrals, Applications of integrals area under a curve, bounded areas, motion problems	Local Assessment
Calculus H	Pre-calculus topics including: equations of lines, systems of equations, functions, piecewise functions, synthetic division  Trigonometry: evaluating trig functions, trig equations  Limits: finding from graphs and algebraically. Squeeze theorem.	Continuity: identifying discontinuities (holes and asymptotes) graphically and algebraically: Derivatives as an instantaneous rate of change. computing with limit formula, differentiation rules (product, quotient, chain, implicit)	Applications of derivatives including; writing equations of tangent lines, related rates, interpreting graphs of derivatives extrema, optimization problems  Newton's method	Integration, u-substitution, definite integrals, Applications of integrals area under a curve, bounded areas, motion problems	Local Assessment

AP Calculus AB	<p>Range of a function  Formal definition of continuity and differentiability  Mean Value Theorem/Rolle's theorem  Local Linearity</p> <p>Natural log functions:  derivatives, antiderivatives  applications such as extrema, motion, tangent lines</p>	<p>Exponential functions:  derivatives, antiderivatives  applications such as extrema, motion, tangent lines  solving differential equations  Growth and Decay  Slope fields</p>	<p>Volumes of revolution around vertical and horizontal lines  Volumes with known cross sections  Calculating net change and total accumulated change  higher integration techniques: completing the square, integration by parts, inverse trig  Derivatives of inverses</p>	<p>AP review ( May- AP exam)</p> <p>Intro to additional Calculus topics: sequences and series</p>	<p>AP exam</p> <p>Local Assessment</p>
SUNY Statistics MAT 125	<p>Understanding the Literacy of Statistics, Graphing Statistics for Understanding, Measures of Central Tendency, Probability, Discrete Random Variables</p>	<p>Normal Curve and Z-Scores, Probability Distributions, Confidence Intervals, Evaluating the mean, Linear Regressions, Least Squares Criteria, Chi-Square Test for the goodness for Fit</p>			<p>College (Local) Final</p>