

Trigonometry/Pre-Calculus

Curriculum Map

	Chapters and Time	Standards and Essential Skills	Formative/Summative Assessments
1 st Quarter	Chapter 1 Functions and Graphs – 5 weeks Chapter 2 Trigonometric Functions of Real Numbers – 4 weeks	<ul style="list-style-type: none"> • Graph in a coordinate plane • Use the Midpoint and Distance Formulas • Test for symmetry • Show the equation represents a circle • Find the slope between two points • Write the equation of a line • Determine parallel and perpendicular lines • Recognize the definition of a function • Use function notation properly • State using proper mathematical notation the domain and range of a function • Graph the transformation of a function 	Formative Assessments Daily Assignments Quizzes FAL Summative Assessments Test

		<p>from a change to its parent function</p> <ul style="list-style-type: none">• Graph a piecewise function• Find relative extrema of a function• Find intervals of increasing and decreasing• Determine if a function is even, odd, or neither• Perform addition, subtraction, multiplication, and division operations on two or more functions• Compose two or more functions• Decompose two or more functions• Find, graph and verify the inverse of a function• Convert among angular measurements of degrees, radians, and revolutions• Express the six trigonometric ratios using the sides of a right triangle• Graph the six basic	
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		trigonometric functions <ul style="list-style-type: none"> • Determine all six trig values given one trig value 	
2 nd Quarter	Chapter 3 Trigonometric Functions of Angles – 4 weeks Chapter 4 Analytic Trigonometry – 4 weeks	<ul style="list-style-type: none"> • State possible co-terminal angles • State reference angles • Solve problems involving angular displacement, angular velocity and angular acceleration • Solve special right triangles • Evaluate trig ratios in all four quadrants • Solve triangles using Law of Sines and Law of Cosines • Find arc length and area of a sector • Simplify trigonometric expressions • Verify trigonometric identities • Use addition and Subtraction formulas • Use double and half angle formulas • Find inverse trig functions • Solve trigonometric equations 	Formative Assessments Daily Assignments Quizzes FAL Summative Assessments Test

<p>3rd Quarter</p>	<p>Chapter 5 Polar Coordinates, Complex Numbers and Vectors – 5 weeks Chapter 7 Exponential and Logarithmic Functions -4 weeks</p>	<ul style="list-style-type: none"> • Plot coordinates of points in polar form • Convert coordinates of points from polar form to rectangular form and vice versa • Convert equations from rectangular for the polar forma and vice versa • Convert complex numbers from polar form to rectangular form and vice versa • Multiply and divide complex numbers in polar form)DeMoivers Theorem • Perform operations on vectors graphically • Perform operations on vectors in component form • Compute the dot product of two vectors • Graph exponential and logarithmic functions • Convert between logarithmic and 	<p>Formative Assessments Daily Assignments Quizzes FAL Summative Assessments Test</p>
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		<p>exponential form</p> <ul style="list-style-type: none"> • Solve exponential and logarithmic equations • Expand and condense logarithmic expressions 	
4 th Quarter	<p>Binomial Expansion – 2 weeks</p> <p>Matrices - 6 weeks</p>	<ul style="list-style-type: none"> • Expand binomials using Pascal's Triangle • Find a specified term in a binomial expansion using combinations • Perform all matrix operations • Solve matrix equations • Find determinants of 2x2 and 3x3 matrices • Find the inverse of a square matrix • Use Cramer's rule to solve systems of equations • Use augmented matrices to solve systems of equations 	