Pre-Calculus Scope and Sequence 2025-2026

TEKS Distribution among Units

Process Standards

	2A.1A	2A.1B	2A.1C	2A.1D	2A.1E	2A.1F	2A.1G
Unit 1	X	X	X	X	X	X	X
Unit 2	X	X	X	X	X	X	X
Unit 3	X	X	X	X	X	X	X
Unit 4	X	X	X	X	X	X	X
Unit 5	X	X	X	X	X	X	X
Unit 6	X	X	X	X	X	X	X
Unit 7	X	X	X	X	X	X	X
Unit 8	X	X	X	X	X	X	X
Unit 9	X	X	X	X	X	X	X

Content Standards

	P.2A	P.2B	P.2C	P.2D	P.2E	P.2F	P.2G	P.2H	**P.2I**	P.2J	P.2K	P.2L	P.2M	**P.2N**	P.2O	P.2P
Unit 1	X	X	X	X		X	X		X	X				X		
Unit 2				X		X	X		X	X	X			X		
Unit 3		X	X		X	X	X		X	X				X		
Unit 4																X
Unit 5				X	X	X	X	X	X			X	X		X	X
Unit 6	X		X	X	X											X
Unit 7																
Unit 8																X
Unit 9																

Content Standards

	P.3A	P.3B	**P.3C**	P.3D	P.3E	P.3F	P.3G	P.3H	P.3I	P.4A	P.4B	P.4C	P.4D	P.4E	**P.4F**	P.4G	P.4H	P.4I	P.4J	P.4K	P.5A	P.5B	**P.5C**	P.5D	**P.5E**	P.5F	P.5G	P.5H	P.5I	P.5J	P.5K	P.5L	P.5M	**P.5N**
Unit 1																														X	X			X
Unit 2																														X	X	X		
Unit 3																											X	X	X					
Unit 4										X	X	X	X	X																				
Unit 5										X																								
Unit 6																																	X	X
Unit 7															X	X	X	X	X	X														
Unit 8	X	X	X	X	X	X	X	X	X																								X	
Unit 9																					X	X	X	X	X	X								

Pre-Calculus
Scope and Sequence 2025-2026

Mathematical Process Standards: The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:

P.1A Apply mathematics to problems arising in everyday life, society, and the workplace
P.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution
P.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems
P.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate
P.1E Create and use representations to organize, record, and communicate mathematical ideas
P.1F Analyze mathematical relationships to connect and communicate mathematical ideas
P.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication

Grading Period 1

Unit 1: Polynomial Function Analysis
Estimated Date Range: Aug. 12 – Sept. 12 (23 total school days)
Instructional & Re-engagement Days in Unit: 23 days

Assessments

STATE/NATIONAL ASSESSMENTS	DISTRICT ASSESSMENTS	COMMON FORMATIVE ASSESSMENTS (CFAs)
N/A	N/A	N/A

Concepts within the Unit	TEKS
Establishing a Positive Mathematics Community Suggested Days: 2	P.1A Apply mathematics to problems arising in everyday life, society, and the workplace P.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution P.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems P.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate P.1E Create and use representations to organize, record, and communicate mathematical ideas P.1F Analyze mathematical relationships to connect and communicate mathematical ideas

	P.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication
Concept #1: Graph and Analyze Key Features of Power Functions Suggested Days: 2	**Priority Standards** **P.2I Determine and analyze the key features of ~~exponential, logarithmic, rational, polynomial,~~ power, ~~trigonometric, inverse trigonometric~~, ~~and piecewise defined~~ functions,~~ including step functions~~ such as domain, range, symmetry, relative maximum, relative minimum, zeros, asymptotes, and intervals over which the function is increasing or decreasing** Important Standards P.2N Analyze situations modeled by functions, ~~including exponential, logarithmic, rational, polynomial, and~~ power functions, to solve real-world problems P.2D describe symmetry of graphs of even and odd functions P.2F graph ~~exponential, logarithmic, rational, polynomial~~, power~~, trigonometric, inverse trigonometric, and piecewise defined~~ functions, ~~including step functions~~ P.2G graph ~~functions, including exponential, logarithmic, sine, cosine, rational, polynomial, and~~ power functions and their transformations, including *af(x), f(x) + d, f(x - c), f(bx)* for specific values of *a, b, c,* and *d*, in mathematical and real-world problems P.2J analyze and describe end behavior of functions, including ~~exponential, logarithmic, rational, polynomial, and~~ power functions, using infinity notation to communicate this characteristic in mathematical and real-world problems
Concept #2: Graph and Analyze Key Features of Piecewise Functions Suggested Days: 4	**Priority Standards** **P.2I Determine and analyze the key features of ~~exponential, logarithmic, rational, polynomial, power, trigonometric, inverse trigonometric~~, ~~and~~ piecewise defined functions, including step functions such as domain, range, symmetry, relative maximum, relative minimum, zeros, asymptotes, and intervals over which the function is increasing or decreasing** Important Standards P.2F graph ~~exponential, logarithmic, rational, polynomial, power, trigonometric, inverse trigonometric, and~~ piecewise defined functions, including step functions
Concept #3: Graph and Analyze Key Features of Polynomial Functions Suggested Days: 3	**Priority Standards** **P.2I Determine and analyze the key features of ~~exponential, logarithmic, rational, polynomial, power, trigonometric, inverse trigonometric~~, ~~and~~ piecewise defined functions, including step functions such as domain,**

	range, symmetry, relative maximum, relative minimum, zeros, asymptotes, and intervals over which the function is increasing or decreasing Important Standards P.2N Analyze situations modeled by ~~functions~~, ~~including exponential, logarithmic, rational,~~ polynomial~~, and power~~ functions, to solve real-world problems Important Standards P.2D describe symmetry of graphs of even and odd functions P.2F graph ~~exponential, logarithmic, rational,~~ polynomial, ~~power, trigonometric, inverse trigonometric, and piecewise defined~~ functions, ~~including step functions~~ P.2G graph ~~functions, including exponential, logarithmic, sine, cosine, rational,~~ polynomial, ~~and power~~ functions and their transformations, including *af(x), f(x) + d, f(x - c), f(bx)* for specific values of *a, b, c,* and *d*, in mathematical and real-world problems P.2J analyze and describe end behavior of ~~functions, including exponential, logarithmic, rational,~~ polynomial, ~~and power~~ functions, using infinity notation to communicate this characteristic in mathematical and real-world problems
Concept #4: Solving Polynomial Equations Suggested Days: 4	**Priority Standards** **P.2N Analyze situations modeled by functions, including ~~exponential, logarithmic, rational,~~ polynomial~~, and power~~ functions, to solve real-world problems** Important Standards P.2I Determine and analyze the key features of ~~exponential, logarithmic, rational,~~ polynomial, ~~power, trigonometric, inverse trigonometric~~, ~~and piecewise defined~~ functions, ~~including step functions~~ such as domain, range, symmetry, relative maximum, relative minimum, zeros, ~~asymptotes~~, and intervals over which the function is increasing or decreasing Important Standards P.2A Use the composition of two functions to model and solve real-world problems P.2B Demonstrate that function composition is not always commutative P.2C Represent a given function as a composite function of two or more functions P.5J Solve polynomial equations with real coefficients by applying a variety of techniques in mathematical and real-world problems
Concept #5: Solving Polynomial Inequalities	**Priority Standards**

Suggested Days: 3	**P.2N Analyze situations modeled by ~~functions, including exponential, logarithmic, rational,~~ polynomial~~, and power~~ functions, to solve real-world problems** Important Standards P.2I Determine and analyze the key features of ~~exponential, logarithmic, rational,~~ polynomial, ~~power, trigonometric, inverse trigonometric~~, ~~and piecewise~~ defined functions, ~~including step functions~~ such as domain, range, symmetry, relative maximum, relative minimum, zeros, ~~asymptotes~~, and intervals over which the function is increasing or decreasing P.5K Solve polynomial inequalities with real coefficients by applying a variety of techniques and write the solution set of the polynomial inequality in interval notation in mathematical and real-world problems

Unit 2: Rational Function Analysis Estimated Date Range: Sept. 15 –Oct. 6 (14 total school days) Instructional & Re-engagement Days in Unit: 12 days		
Assessments		
STATE/NATIONAL ASSESSMENTS PSAT (1 day) Testing Window Oct. 2	**DISTRICT ASSESSMENTS** N/A	**COMMON FORMATIVE ASSESSMENTS (CFAs)** N/A

Concepts within the Unit	**TEKS**
Concept #1: Graph and Analyze Key Features of Rational Functions Suggested Days: 7	**Priority Standards** **P.2I Determine and analyze the key features of ~~exponential, logarithmic,~~ rational~~, polynomial, power, trigonometric, inverse trigonometric~~, ~~and piecewise defined~~ functions, ~~including step functions~~ such as domain, range, symmetry, relative maximum, relative minimum, zeros, asymptotes, and intervals over which the function is increasing or decreasing** Important Standards P.2N Analyze situations modeled by ~~functions,~~ ~~including exponential, logarithmic,~~ rational, ~~polynomial, and power~~ functions, to solve real-world problems Important Standards P.2D describe symmetry of graphs of even and odd functions P.2F graph ~~exponential, logarithmic,~~ rational, ~~polynomial, power, trigonometric, inverse trigonometric, and piecewise defined~~ functions, ~~including step functions~~ P.2G graph f~~unctions~~, ~~including exponential, logarithmic, sine, cosine,~~ rational, ~~polynomial, and power~~ functions and their transformations, including *af(x), f(x) + d, f(x - c), f(bx)* for specific values of *a, b, c,* and *d*, in mathematical and real-world problems

	P.2J analyze and describe end behavior of ~~functions, including exponential, logarithmic,~~ rational~~, polynomial, and power~~ functions, using infinity notation to communicate this characteristic in mathematical and real-world problems P.2K analyze characteristics of rational functions and the behavior of the function around the asymptotes, including horizontal, vertical, and oblique asymptotes
Concept #2: Solving Rational Inequalities Suggested Days: 4	**Priority Standards** **P.2N Analyze situations modeled by ~~functions, including exponential, logarithmic,~~ rational, ~~polynomial, and power~~ functions, to solve real-world problems** Important Standards P.2I Determine and analyze the key features of ~~exponential, logarithmic,~~ rational, ~~polynomial, power, trigonometric, inverse trigonometric~~, ~~and piecewise defined~~ functions, ~~including step functions~~ such as domain, range, symmetry, relative maximum, relative minimum, zeros, asymptotes, and intervals over which the function is increasing or decreasing P.5J solve polynomial equations with real coefficients by applying a variety of techniques in mathematical and real-world problems P.5K Solve polynomial inequalities with real coefficients by applying a variety of techniques and write the solution set of the polynomial inequality in interval notation in mathematical and real-world problems P.5L solve rational inequalities with real coefficients by applying a variety of techniques and write the solution set of the rational inequality in interval notation in mathematical and real-world problems
Unit 3: Exponential and Logarithmic Function Analysis (Continues in Grading Period 2) Estimated Date Range: Estimated Date Range: Oct. 7 – Nov. 7 (18 total school days) Instructional & Re-engagement Days in Unit: 18 *For details, see Grading Period 2*	

Grading Period 2

Unit 3: Exponential and Logarithmic Function Analysis (Continued) Estimated Date Range: Estimated Date Range: Oct. 7 – Nov. 6 (17 total school days) Instructional & Re-engagement Days in Unit: 17		
Assessments		
STATE/NATIONAL ASSESSMENTS N/A	**DISTRICT ASSESSMENTS** N/A	**COMMON FORMATIVE ASSESSMENTS (CFAs)** N/A
Concepts within the Unit	**TEKS**	

Concept #1: Exponential and Logarithmic Functions as Inverses Suggested Days: 4	Important Standards P.2I Determine and analyze the key features of exponential, logarithmic~~, rational, polynomial, power, trigonometric, inverse trigonometric, and piecewise defined~~ functions, ~~including step functions~~ such as domain, range, symmetry, relative maximum, relative minimum, zeros, asymptotes, and intervals over which the function is increasing or decreasing Important Standards P.2B Demonstrate that function composition is not always commutative P.2E determine an inverse function, when it exists, for a given function over its domain or a subset of its domain and represent the inverse using multiple representations P.2F graph exponential, logarithmic~~, rational, polynomial, power, trigonometric, inverse trigonometric, and piecewise defined~~ functions, ~~including step functions~~
Concept #2: Graph and Analyze Key Features of Exponential and Logarithmic Functions Suggested Days: 4	**Priority Standards** **P.2I Determine and analyze the key features of exponential, logarithmic~~, rational, polynomial, power, trigonometric, inverse trigonometric, and piecewise defined functions, including step~~ functions such as domain, range, symmetry, relative maximum, relative minimum, zeros, asymptotes, and intervals over which the function is increasing or decreasing** Important Standards P.2F graph exponential, logarithmic~~, rational, polynomial, power, trigonometric, inverse trigonometric, and piecewise defined functions, including step~~ functions P.2G graph functions, including exponential, logarithmic~~, sine, cosine, rational, polynomial, and power~~ functions and their transformations, including *af(x), f(x) + d, f(x - c), f(bx)* for specific values of *a, b, c,* and *d*, in mathematical and real-world problems P.2J analyze and describe end behavior of functions, including exponential, logarithmic, ~~rational, polynomial, and power~~ functions, using infinity notation to communicate this characteristic in mathematical and real-world problems
Concept #3: Properties of Logarithms Suggested Days: 2	Important Standards P.2N Analyze situations modeled by ~~functions~~, ~~including~~ exponential, logarithmic, ~~rational, polynomial, and power~~ functions, to solve real-world problems Important Standards P.5G use the properties of logarithms to evaluate or transform logarithmic expressions

Concept #4: Solving Exponential and Logarithmic Equations Suggested Days: 5	**Priority Standards** **P.2N Analyze situations modeled by functions, including exponential, logarithmic~~, rational, polynomial, and power~~ functions, to solve real-world problems** Important Standards P.2I Determine and analyze the key features of exponential, logarithmic~~, rational, polynomial, power, trigonometric, inverse trigonometric~~, ~~and piecewise defined~~ functions,~~ including step functions~~ such as domain, range, symmetry, relative maximum, relative minimum, zeros, asymptotes, and intervals over which the function is increasing or decreasing P.2C Represent a given function as a composite function of two or more functions P.5G use the properties of logarithms to evaluate or transform logarithmic expressions P.5H generate and solve logarithmic equations in mathematical and real-world problems P.5I generate and solve exponential equations in mathematical and real-world problems

Unit 4: Introduction of Periodic Functions
Estimated Date Range: Nov. 7 – Nov. 21 (11 total school days)
Instructional & Re-engagement Days in Unit: 11 days

Assessments

STATE/NATIONAL ASSESSMENTS	DISTRICT ASSESSMENTS	COMMON FORMATIVE ASSESSMENTS (CFAs)
N/A	N/A	N/A

Concepts within the Unit	TEKS
Concept #1: Angle Measures and Positions in Degrees and Radians Suggested Days: 3	Important Standards P.4B describe the relationship between degree and radian measure on the unit circle P.4C represent angles in radians or degrees based on the concept of rotation and find the measure of reference angles and angles in standard position P.4D represent angles in radians or degrees based on the concept of rotation in mathematical and real-word problems, including linear and angular velocity
Concept #2: Unit Circle and Evaluating Trigonometric Functions Suggested Days: 7	Important Standards P.2P determine the values of the trigonometric functions at the special angles and relate them in mathematical and real-word problems P.4A determine the relationship between the unit circle and the definition of a periodic function to evaluate trigonometric functions in mathematical and real-word problems P.4B describe the relationship between degree and radian measure on the unit circle P.4E determine the value of trigonometric ratios of angles and solve problems involving trigonometric ratios in mathematical and real-word problems

Unit 5: Graphing and Applications of Sine and Cosine Estimated Date Range: Dec. 1 – Dec. 19 (15 total school days) Instructional & Re-engagement Days in Unit: 11 days			
Assessments			
STATE/NATIONAL ASSESSMENTS N/A	**DISTRICT ASSESSMENTS** N/A	**COMMON FORMATIVE ASSESSMENTS (CFAs)** N/A	**Semester Exams** (4 days) Testing Window Dec. 16 – Dec. 19

Concepts within the Unit	TEKS
Concept #1: Graphing Sine and Cosine Suggested Days: 4	**Priority Standards** **P.2I determine and analyze the key features of ~~exponential, logarithmic, rational, polynomial, power,~~ trigonometric, ~~inverse trigonometric, and piecewise defined functions, including step functions~~ such as domain, range, symmetry, relative maximum, relative minimum, zeros, ~~asymptotes~~, and intervals over which the function is increasing or decreasing;** Important Standards P.2D Describe symmetry of graphs of even and odd functions P.2F graph ~~exponential, logarithmic, rational, polynomial, power,~~ trigonometric, ~~inverse trigonometric, and piecewise defined functions, including step~~ functions P.2G Graph functions, including ~~exponential, logarithmic~~, sine, cosine~~, rational, polynomials, and power functions~~ and their transformations, including and for specific values of *a*, *b*, *c*, and *d*, in mathematical and real-world problems P.4A determine the relationship between the unit circle and the definition of a periodic function to evaluate trigonometric functions in mathematical and real-word problems
Concept #2: Sinusoidal Applications Suggested Days: 4	**Priority Standards** **P.5N generate and solve trigonometric equations in mathematical and real-world problems.** Important Standards P.2O Develop and use a sinusoidal function that models a situation in mathematics and real-world problems

Grading Period 3

Unit 6: Graphing and Applications of All Trigonometric Functions Estimated Date Range: Jan. 8 – Jan. 23 (11 total school days) Instructional & Re-engagement Days in Unit: 11 days		
Assessments		
STATE/NATIONAL ASSESSMENTS N/A	**DISTRICT ASSESSMENTS** N/A	**COMMON FORMATIVE ASSESSMENTS (CFAs)** N/A

Concepts within the Unit	TEKS
Concept #1: Graphing All Trig Functions Suggested Days: 4	**Priority Standards** **P.2I determine and analyze the key features of ~~exponential, logarithmic, rational, polynomial, power,~~ trigonometric, ~~inverse trigonometric, and piecewise defined functions, including step functions~~ such as domain, range, symmetry, relative maximum, relative minimum, zeros, asymptotes, and intervals over which the function is increasing or decreasing;** Important Standards P.2D Describe symmetry of graphs of even and odd functions P.2F graph ~~exponential, logarithmic, rational, polynomial, power,~~ trigonometric, ~~inverse trigonometric, and piecewise defined functions, including step~~ functions P.2L determine various types of discontinuities in the interval $(-\infty, \infty)$ as they relate to functions and explore the limitations of the graphing calculator as it relates to the behavior of the function around discontinuities P.2M describe the left-sided behavior and the right-sided behavior of the graph of a function around discontinuities
Concept #2: Inverse Trig Functions and Their Graphs Suggested Days: 4	**Priority Standards** **P.2I determine and analyze the key features of ~~exponential, logarithmic, rational, polynomial, power,~~ trigonometric, ~~inverse trigonometric, and piecewise defined functions, including step functions~~ such as domain, range, symmetry, relative maximum, relative minimum, zeros, asymptotes, and intervals over which the function is increasing or decreasing;** Important Standards P.2D Describe symmetry of graphs of even and odd functions P.2E determine an inverse function, when it exists, for a given function over its domain or a subset of its domain and represent the inverse using multiple representations; P.2F graph ~~exponential, logarithmic, rational, polynomial, power,~~ trigonometric, inverse trigonometric, ~~and piecewise defined functions, including step~~ functions P.2H graph arcsin *x* and arccos *x* and describe the limitations on the domain; P.2P determine the values of the trigonometric functions at the special angles and relate them in mathematical and real-world problems. P.4A determine the relationship between the unit circle and the definition of a periodic function to evaluate trigonometric functions in mathematical and real-word problems
Unit 7: Analytical Trigonometry Estimated Date Range: Jan. 26 – Feb. 11 (13 total school days) Instructional & Re-engagement Days in Unit: 13 days	

Assessments		
STATE/NATIONAL ASSESSMENTS N/A	**DISTRICT ASSESSMENTS** N/A	**COMMON FORMATIVE ASSESSMENTS (CFAs)** N/A

Concepts within the Unit	**TEKS**
Concept #1: Verifying Trig Identities Suggested Days: 5	Important Standards P.2D Describe symmetry of graphs of even and odd functions P.5M use trigonometric identities such as reciprocal, quotient, Pythagorean, co-functions, even/odd, and sum and difference identities for cosine and sine to simplify trigonometric expressions
Concept #2: Solving Trig Equations Suggested Days: 6	**Priority Standards** **P.5N generate and solve trigonometric equations in mathematical and real-world problems** Important Standards P.2A use the composition of two functions to model and solve real-world problems P.2C represent a given function as a composite function of two or more functions P.2E determine an inverse function, when it exists, for a given function over its domain or a subset of its domain and represent the inverse using multiple representations; P.2P determine the values of the trigonometric functions at the special angles and relate them in mathematical and real-world problems. P.5M use trigonometric identities such as reciprocal, quotient, Pythagorean, co-functions, even/odd, and sum and difference identities for cosine and sine to simplify trigonometric expressions

Unit 8: Vectors with Trigonometry
Estimated Date Range: Feb. 17 – Mar. 5 (13 total school days)
Instructional & Re-engagement days: 12 days

Assessments		
STATE/NATIONAL ASSESSMENTS SAT (1 day) Mar. 4 TELPAS (1 day) Testing Window Feb. 12 – Mar.27	**DISTRICT ASSESSMENTS** N/A	**COMMON FORMATIVE ASSESSMENTS (CFAs)** N/A

Concepts within the Unit	**TEKS**
Concept #1: Geometric and Symbolic Representations Suggested Days: 3	Important Standards P.4I use vectors to model situations involving magnitude and direction P.4J represent the addition of vectors and the multiplication of a vector by a scalar geometrically and symbolically P.4K apply vector addition and multiplication of a vector by a scalar in mathematical and real-word problems
Concept #2: Vector Applications Suggested Days: 7	**Priority Standards** **P.4F use trigonometry in mathematical and real-word problems, including directional bearing**

	Important Standards P.4G use the Law of Sines in mathematical and real-world problems P.4H use the Law of Cosines in mathematical and real-word problems P.4K apply vector addition and multiplication of a vector by a scalar in mathematical and real-word problems

Unit 9: Conic, Parametric, and Polar Function Analysis (Continues in Grading Period 4) Estimated Date Range: Mar. 9 – April 15 (22 total school days) Instructional & Re-engagement Days in Unit: 21 days		
Assessments		
STATE/NATIONAL ASSESSMENTS TELPAS (1 day) Testing Window Feb. 12 – Mar.20	**DISTRICT ASSESSMENTS** N/A	**COMMON FORMATIVE ASSESSMENTS (CFAs)** N/A

Concepts within the Unit	**TEKS**
Concept #1: Conics Suggested Days: 5	Important Standards P.3F determine the conic section formed when a plane intersects a double-napped cone P.3G make connections between the locus definition of conic sections and their equations in rectangular coordinates P.3H use the characteristics of an ellipse to write the equation of an ellipse with center (h, k) P.3I use the characteristics of a hyperbola to write the equation of a hyperbola with center (h, k)
Concept #2: Parametric Equations Suggested Days: 7	**Priority Standards** **P.3C use parametric equations to model and solve mathematical and real-world problems** Important Standards P.3A graph a set of parametric equations P.3B convert parametric equations into rectangular relations and convert rectangular relations into parametric equations P.2P determine the values of the trigonometric functions at the special angles and relate them in mathematical and real-world problems P.5M use trigonometric identities such as reciprocal, quotient, Pythagorean, co-functions, even/odd, and sum and difference identities for cosine and sine to simplify trigonometric expressions
Concept #3: Polar Equations Suggested Days: 5	Important Standards P.3D graph points in the polar coordinate system and convert between rectangular coordinates and polar coordinates P.3E graph polar equations by plotting points and using technology

	P.2P determine the values of the trigonometric functions at the special angles and relate them in mathematical and real-world problems P.5M use trigonometric identities such as reciprocal, quotient, Pythagorean, co-functions, even/odd, and sum and difference identities for cosine and sine to simplify trigonometric expressions

Grading Period 4

Unit 9: Conic, Parametric, and Polar Function Analysis (Continued)
Estimated Date Range: Mar. 9 – April 15 (22 total school days)
Instructional & Re-engagement Days in Unit: 21 days
See Grading Period 3 for Details

Unit 10: Sequences and Series
Estimated Date Range: April 16– May 28 (30 total school days)
Instructional & Re-engagement Days in Unit: 26 days

Assessments

STATE/NATIONAL ASSESSMENTS	DISTRICT ASSESSMENTS	COMMON FORMATIVE ASSESSMENTS (CFAs)	Semester Exams
N/A	N/A	N/A	(4 days) Testing Window May 22 – May 28

Concepts within the Unit	TEKS
Concept #1: Arithmetic and Geometric Sequences Suggested Days: 5	Important Standards P.5B represent arithmetic sequences and geometric sequences using recursive formulas
Concept #2: Arithmetic Series Suggested Days: 4	**Priority Standards** **P.5C calculate the nth term and the nth partial sum of an arithmetic series in mathematical and real-world problems** Important Standards P.5A evaluate finite sums and geometric series, when possible, written in sigma notation P.5D represent arithmetic series and geometric series using sigma notation
Concept #3: Geometric Series Suggested Days: 4	**Priority Standards** **A.5E calculate the n^{th} term of a geometric series, the n^{th} partial sum of a geometric series, and sum of an infinite geometric series when it exists** Important Standards P.5A evaluate finite sums and geometric series, when possible, written in sigma notation

	P.5D represent arithmetic series and geometric series using sigma notation
Concept #4: Binomial Theorem Suggested Days: 3	<u>Important Standards</u> P.5F apply the Binomial Theorem for the expansion of $(a + b)^n$ in powers of a and b for a positive integer n, where a and b are any numbers