



1 st Quarter (42 Days)			
Resources: Precalculus, McGraw Hill (2025)			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)
1 st : August 11 – August 14 (4 days)	Mathematical process standards	TSW applies mathematics to problems arising in everyday life, society, and the workplace. TSW uses 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 TSW selects 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. TSW Communicates mathematical ideas, reasoning, and their implications using multiple reasoning, including symbols, diagrams, graphs, and language appropriate. TSW creates and uses representations to organize, record, and communicate mathematical ideas. TSW analyzes mathematical relationships. TSW displays, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communications	1A 1B 1C 1D 1E 1F 1G
2 nd : August 17 – August 21 (5 days)	Functions from a Calculus Perspective	TSW: determine and analyze the key features of exponential, logarithmic, rational, polynomial, power, trigonometric, inverse trigonometric, and piecewise TSW: 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. TSW: describe the symmetry of graphs of even and odd functions. Describe the left-sided behavior and the right-sided behavior of the graph of a function around discontinuities.	P2 I P2 D P2 M
3 rd : August 24 – August 28 (5 days)	Functions from a Calculus Perspective	TSW: analyze and describe the 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. TSW uses the composition of two functions to model and solve real-world problems. TSW demonstrates that function composition is not always commutative. TSW determines an inverse function, when it exists, for a given function over its domain or a subset of its domain and represents the inverse using multiple representations;	P2 A P2 B P2 E P2J
4 th : August 31 – September 4 (5 days)	Power, Polynomial, And Rational Functions	TSW graphs are exponential, logarithmic, rational, polynomial, power, trigonometric, inverse trigonometric, and piecewise-defined functions, including step functions. TSW graph functions, including exponential, logarithmic, sine, cosine, rational,	P2F P2G



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		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;	
5 th : September 8 – September 11 (4 days)	Power, Polynomial, And Rational Functions Monday: Labor Day Holiday	TSW analyzes and describe the 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;	P5 J
6 th : September 14 - September 18 (5 days)	Power, Polynomial, And Rational Functions	TSW analyzes the characteristics of rational functions and the behavior of the function around the asymptotes, including horizontal, vertical, and oblique asymptotes. TSW determines various types of discontinuities in the interval $(-\infty, \infty)$ as they relate to functions and explores the limitations of the graphing calculator as it relates to the behavior of the function around discontinuities;	P2 K P2L
7 th : September 21 - September 25 (5 days)	Exponential and Logarithmic Functions	TSW graphs exponential, logarithmic, rational, polynomial, power, trigonometric, inverse trigonometric, and piecewise-defined functions, including step functions. TSW 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;	P2 F P2G
8 th : September 28 - October 2 (5 days)	Exponential and Logarithmic Functions	TSW solves polynomial equations with real coefficients by applying a variety of techniques in mathematical and real-world problems. TSW generates and solves logarithmic equations in mathematical and real-world problems. TSW generates and solves exponential equations in mathematical and real-world problems.	P5J P5H P5I
9 th : October 5 - October 8 (4 days)	Trigonometric Functions Friday: Professional Development	TSW determines the value of trigonometric ratios of angles and solves problems involving trigonometric ratios in mathematical and real-world problems. TSW uses trigonometry in mathematical and real-world problems, including directional bearing. TSW determines the values of the trigonometric functions at special angles and relates them to mathematical and real-world problems. TSW determines the relationship between the unit circle and the definition of a periodic function to evaluate trigonometric functions in mathematical and real-world problems;	P4 E P4 F P2 P P4 A



2 nd Quarter (42 Days)			
Resources: Precalculus, McGraw Hill (2025)			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)
1st: October 14 – October 16 (3 days)	Trigonometric Functions	TSW describes the relationship between degree and radian measure on the unit circle. TSW represents angles in radians or degrees based on the concept of rotation and finds the measure of reference angles and angles in standard position. TSW graphs are exponential, logarithmic, rational, polynomial, power, trigonometric, inverse trigonometric, and piecewise-defined functions, including step functions. TSW 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;	P4B P4 C P2F P2G
2nd: October 19 – October 23 (5 days)	Trigonometric Functions	TSW determines and analyzes 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. TSW graph $\arcsin x$ and $\arccos x$ and describe the limitations on the domain. TSW represents the addition of vectors and the multiplication of a vector by a scalar geometrically and symbolically. use the Law of Cosines in mathematical and real-world problems;	P2I P2 H P 4 J P4 H
3rd: October 26 – October 29 (4 days)	Trigonometric Identities and Equations Friday: Parent-Teacher Conferences	TSW uses trigonometric identities such as reciprocal, quotient, Pythagorean, cofunctions, even/odd, and sum and difference identities for cosine and sine to simplify trigonometric expressions; and TSW generates and solves trigonometric equations in mathematical and real-world problems.	P 5 M P5 N
4th: November 2 – November 6 (5 days)	Trigonometric Identities and Equations	TSW uses trigonometric identities such as reciprocal, quotient, Pythagorean, cofunctions, even/odd, and sum and difference identities for cosine and sine to simplify trigonometric expressions; and TSW generates and solves trigonometric equations in mathematical and real-world problems.	P 5 M P5 N
5th: November 9 – November 13 (5 days)	System of Equations and Matrices	TSW applies mathematics to problems arising in everyday life, society, and the workplace. TSW uses a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the	P1A P1 B P1 D



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		solution, and evaluating the problem-solving process and the reasonableness of the solution. TSW Communicate mathematical ideas reasoning and their implications using multiple reasoning, including symbols diagrams, graphs and language appropriate,	
6 th : November 16 – November 20 (5 days)	System of Equations and Matrices	TSW creates and uses representations to organize, record, and communicate mathematical ideas.	P1E P1 G
Nov 23-27	Thanksgiving Holiday		
7 th : November 30 – December 4 (5 days)	Conic Sections and Parametric Equations	TSW determines the conic section formed when a plane intersects a double-napped cone. TSW make connections between the locus definition of conic sections and their equations in rectangular coordinates;	P3 F P3 G
8 th : December 7 – December 11 (5 days)	Conic Sections and Parametric Equations	TSW uses the characteristics of an ellipse to write the equation of an ellipse with center (h, k) TSW uses the characteristics of a hyperbola to write the equation of a hyperbola with center (h, k).	P3 H P3 I
9 th : December 14 – December 18 (5 days)	Conic Sections and Parametric Equations	TSW uses the characteristics of an ellipse to write the equation of an ellipse with center (h, k) TSW uses the characteristics of a hyperbola to write the equation of a hyperbola with center (h, k).	P3 H P3 I
Dec 21-Jan 1	Winter Break		

3 rd Quarter (37 Days)			
Resources: Precalculus, McGraw Hill (2025)			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)
1 st : January 5 – January 8 (4 days)	Conic Sections and Parametric Equations Monday: Professional Development	TSW converts parametric equations into rectangular relations and converts rectangular relations into parametric equations. TSW uses parametric equations to model and solve mathematical and real-world problems;	P3 B P3 C
2 nd : January 11 –	Vectors	TSW use vectors to model situations involving magnitude and direction.	P4 I



3 rd Quarter (37 Days)			
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Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)
January 15 (5 days)		TSW represents the addition of vectors and the multiplication of a vector by a scalar geometrically and symbolically. TSW applies vector addition and multiplication of a vector by a scalar in mathematical and real-world problems.	P4 J P4 K
3 rd : January 19 – January 22 (4 days)	Vectors Monday: MLK Holiday	TSW uses vectors to model situations involving magnitude and direction. TSW represents the addition of vectors and the multiplication of a vector by a scalar geometrically and symbolically. TSW applies vector addition and multiplication of a vector by a scalar in mathematical and real-world problems.	P4 I P4 J P4 K
4 th : January 25 – January 29 (5 days)	Vectors 100 Days of School	TSW uses vectors to model situations involving magnitude and direction. TSW represents the addition of vectors and the multiplication of a vector by a scalar geometrically and symbolically. TSW applies vector addition and multiplication of a vector by a scalar in mathematical and real-world problems.	P4 I P4 J P4 K
5 th : February 1 – February 5 (5 days)	Polar Coordinates and complex numbers	TSW graph points in the polar coordinate system and convert between rectangular coordinates and polar coordinates. TSW graphs polar equations by plotting points and using technology.	P3 D P3 E
6 th : February 8 – February 12 (5 days)	Polar Coordinates and complex numbers	TSW graph points in the polar coordinate system and convert between rectangular coordinates and polar coordinates. TSW graphs polar equations by plotting points and using technology.	P3 D P3 E
7 th : February 16 – February 19 (4 days)	Sequences and Series Monday: School closed	TSW represents arithmetic sequences and geometric sequences using recursive formulas. TSW calculates the nth term and the nth partial sum of an arithmetic series in mathematical and real-world problems. TSW evaluates finite sums and geometric series, when possible, written in sigma notation;	P 5 B P5 C P5 A
8 th : February 22 – February 26 (5 days)	Sequences and Series	TSW calculates the nth term of a geometric series, the nth partial sum of a geometric series, and the sum of an infinite geometric series when it exists. TSW applies 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;	P5 E P5 F
March 1-12	Spring & Ramadan Holiday		



4 th Quarter (51 Days)			
Resources: Precalculus, McGraw Hill (2025)			
Week	Unit/Lesson		Reporting Categories (TEKS)
1st: March 15 – March 19 (5 days)	Inferential Statistics	TSW applies mathematics to problems arising in everyday life, society, and the workplace. TSW uses 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 TSW selects 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.	P1 A P1 D P1 E
2nd: March 22 – March 26 (5 days)	Inferential Statistics	TSW Communicate mathematical ideas reasoning and their implications using multiple reasoning, including symbols, diagrams, graphs, and language appropriate, TSW creates and uses representations to organize, record, and communicate mathematical ideas. TSW analyzes mathematical relationships. TSW displays, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communications	P1F P1 G P1 B P1 C
3rd: March 29 – April 2 (5 days)	Limits and Derivatives	TSW applies mathematics to problems arising in everyday life, society, and the workplace. TSW uses 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 TSW selects 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.	P1 A P1 D P1 E
4th: April 5 – April 9 (5 days)		Ramadan Break	
5th: April 12 – April 16 (5 days)	Limits and Derivatives	TSW Communicates mathematical ideas reasoning and their implications using multiple reasoning, including symbols, diagrams, graphs, and language appropriate, TSW creates and uses representations to organize, record, and communicate mathematical ideas. TSW analyzes mathematical relationships. TSW displays, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communications	P1F P1 G P1 B P1 C
6th: April 19 – April 23 (5 days)	Review and Assessment	Project-based learning. Review and Assessment	Review



4 th Quarter (51 Days)			
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Week	Unit/Lesson		Reporting Categories (TEKS)
7 th : April 26 – April 30 (5 days)	STAAR	Project-based learning. Review and Assessment	Review
8 th : May 3 – May 7 (5 days)	STAAR	Project-based learning. Review and Assessment	Review
9 th : May 10 – May 14 (5 days)	STAAR	Project-based learning. Review and Assessment	Review
10 th : May 19 – May 21 (3 days)	Review and Assessment	Review and Assessment	Review
11 th : May 24 – May 27 (4 days)	Award Ceremonies Graduation Ceremonies		