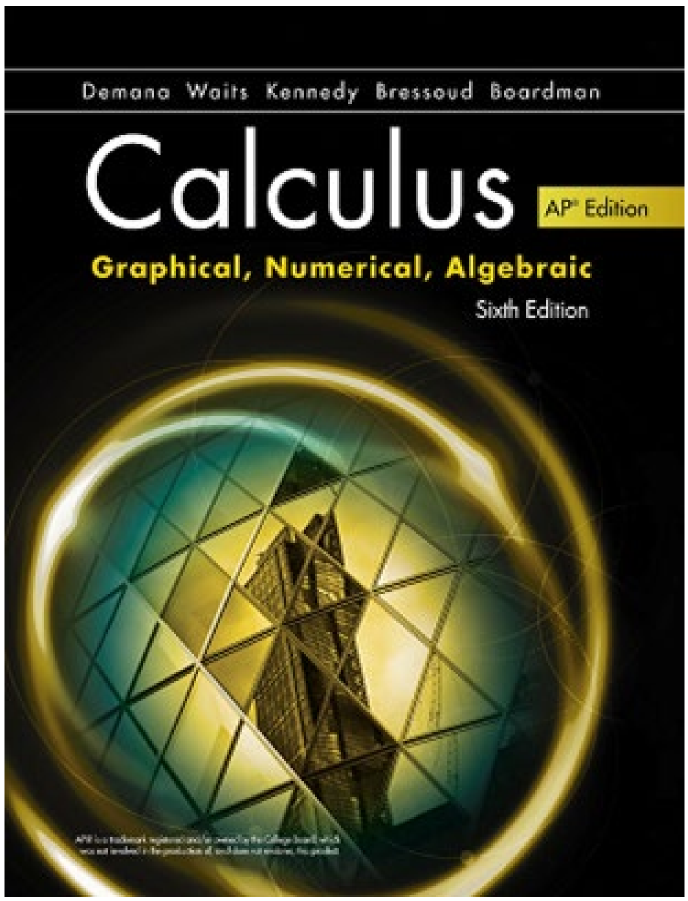
SAVVAS
LEARNING COMPANY

Savvas is proud to partner with Pearson to offer the best in AP, honors, and electives products.

A Correlation of

Calculus
Graphical, Numerical, Algebraic
6th / AP Edition, ©2020



To the

Advanced Placement
Calculus AB/BC Standards

Prepared by Savvas Learning Company, distributor of Pearson Advanced Placement, Honors & Electives products.

A Correlation of Calculus: Graphical, Numerical, Algebraic 6^{th}/AP Edition, ©2020
To the Advanced Placement Calculus AB/BC Standards

Table of Contents

A Correlation of Calculus: Graphical, Numerical, Algebraic 6th/AP Edition, ©2020
To the Advanced Placement Calculus AB/BC Standards

AP CALCULUS AB AND BC		Calculus Graphical, Numerical, Algebraic 6th/AP Edition, ©2020
Enduring Understanding	**Topic**	
UNIT 1 Limits and Continuity		
CHA-1 Calculus allows us to generalize knowledge about motion to diverse problems involving change.	1.1 Introducing Calculus: Can Change Occur at an Instant?	
	CHA-1.A Interpret the rate of change at an instant in terms of average rates of change over intervals containing that instant.	**SE/TE:** 60-61, 63-64, 91-92, 95-96, 97-99, 133-134, 141
LIM-1 Reasoning with definitions, theorems, and properties can be used to justify claims about limits.	1.2 Defining Limits and Using Limit Notation	
	LIM-1.A Represent limits analytically using correct notation.	**SE/TE:** 64-69, 74-79, 585-586
	LIM-1.B Interpret limits expressed in analytic notation.	**SE/TE:** 70-72, 79-81
	1.3 Estimating Limit Values from Graphs	
	LIM-1.C Estimate limits of functions.	**SE/TE:** 67-69, 70, 71, 74, 75
	1.4 Estimating Limit Values from Tables	
	LIM-1.C Estimate limits of functions.	**SE/TE:** 70 (#15-20), 71 (#51-54)
	1.5 Determining Limits Using Algebraic Properties of Limits	
	LIM-1.D Determine the limits of functions using limit theorems.	**SE/TE:** 65-66, 70, 75, 76, 80
	1.6 Determining Limits Using Algebraic Manipulation	
	LIM-1.D Determine the limits of functions using limit theorems.	**SE/TE:** 65-66, 70, 77-79, 80
	1.7 Selecting Procedures for Determining Limits	**SE/TE:** 68-69, 70, 72, 80
	1.8 Determining Limits Using the Squeeze Theorem	
	LIM-1.E Determine the limits of functions using equivalent expressions for the function or the squeeze theorem.	**SE/TE:** 69, 72 (#65-68), 75, 80
	1.9 Connecting Multiple Representations of Limits	**SE/TE:** 72 (#57-64)

AP CALCULUS AB AND BC		Calculus Graphical, Numerical, Algebraic 6th/AP Edition, ©2020
Enduring Understanding	**Topic**	
LIM-2 Reasoning with definitions, theorems, and properties can be used to justify claims about continuity.	1.10 Exploring Types of Discontinuities	
	LIM-2.A Justify conclusions about continuity at a point using the definition.	**SE/TE:** 82-85, 89
	1.11 Defining Continuity at a Point	
	LIM-2.A Justify conclusions about continuity at a point using the definition.	**SE/TE:** 85-86, 89
	1.12 Confirming Continuity over an Interval	
	LIM-2.B Determine intervals over which a function is continuous.	**SE/TE:** 86-88, 89-90
	1.13 Removing Discontinuities	
	LIM-2.C Determine values of x or solve for parameters that make discontinuous functions continuous, if possible.	**SE/TE:** 83-85, 88-90
	1.14 Connecting Infinite Limits and Vertical Asymptotes	
	LIM-2.D Interpret the behavior of functions using limits involving infinity.	**SE/TE:** 76-79, 80-81
	1.15 Connecting Limits at Infinity and Horizontal Asymptotes	
	LIM-2.D Interpret the behavior of functions using limits involving infinity.	**SE/TE:** 74-75, 80-81
FUN-1 Existence theorems allow us to draw conclusions about a function's behavior on an interval without precisely locating that behavior.	1.16 Working with the Intermediate Value Theorem (IVT)	
	FUN-1.A Explain the behavior of a function on an interval using the Intermediate Value Theorem.	**SE/TE:** 87-88, 89

AP CALCULUS AB AND BC		**Calculus Graphical, Numerical, Algebraic 6th/AP Edition, ©2020**
Enduring Understanding	**Topic**	
UNIT 2 Differentiation: Definition and Fundamental Properties		
CHA-2 Derivatives allow us to determine rates of change at an instant by applying limits to knowledge about rates of change over intervals.	2.1 Defining Average and Instantaneous Rates of Change at a Point	
	CHA-2.A Determine average rates of change using difference quotients	**SE/TE:** 91-95, 97-99
	CHA-2.B Represent the derivative of a function as the limit of a difference quotient.	**SE/TE:** 95-97, 97-99
	2.2 Defining the Derivative of a Function and Using Derivative Notation	
	CHA-2.B Represent the derivative of a function as the limit of a difference quotient.	**SE/TE:** 105-107, 111
	CHA-2.C Determine the equation of a line tangent to a curve at a given point.	**SE/TE:** 92-95, 98, 102, 127-128, 130 (#27, 28)
	2.3 Estimating Derivatives of a Function at a Point	
	CHA-2.D Estimate derivatives.	**SE/TE:** 109-110, 113
FUN-2 Recognizing that a function's derivative may also be a function allows us to develop knowledge about the related behaviors of both.	2.4 Connecting Differentiability and Continuity: Determining When Derivatives Do and Do Not Exist	
	FUN-2.A Explain the relationship between differentiability and continuity.	**SE/TE:** 110, 113, 115-116, 119, 120
FUN-3 Recognizing opportunities to apply derivative rules can simplify differentiation.	2.5 Applying the Power Rule	
	FUN-3.A Calculate derivatives of familiar functions.	**SE/TE:** 122, 127-128, 130
	2.6 Derivative Rules: Constant, Sum, Difference, and Constant Multiple	
	FUN-3.A Calculate derivatives of familiar functions.	**SE/TE:** 123-127, 129-131
FUN-3 Recognizing opportunities to apply derivative rules can simplify differentiation.	2.7 Derivatives of cos x, sin x, ex, and ln x	
	FUN-3.A Calculate derivatives of familiar functions.	**SE/TE:** 147-149, 150, 152, 186-187, 188-189, 193-194
LIM-3 Reasoning with definitions, theorems, and properties can be used to determine a limit.	2.7 Derivatives of cos x, sin x, ex, and ln x	
	LIM-3.A Interpret a limit as a definition of a derivative.	**SE/TE:** 146, 153 (#50, 51),, 186, 194 (#61)

AP CALCULUS AB AND BC		Calculus Graphical, Numerical, Algebraic 6th/AP Edition, ©2020
Enduring Understanding	**Topic**	
FUN-3 Recognizing opportunities to apply derivative rules can simplify differentiation.	2.8 The Product Rule	
	FUN-3.B Calculate derivatives of products and quotients of differentiable functions.	**SE/TE:** 125-126, 130
	2.9 The Quotient Rule	
	FUN-3.B Calculate derivatives of products and quotients of differentiable functions.	**SE/TE:** 126-127, 130
	2.10 Finding the Derivatives of Tangent, Cotangent, Secant, and/or Cosecant Functions	
	FUN-3.B Calculate derivatives of products and quotients of differentiable functions.	**SE/TE:** 148-151, 152
UNIT 3 Differentiation: Composite, Implicit, and Inverse Functions		
FUN-3 Recognizing opportunities to apply derivative rules can simplify differentiation.	3.1 The Chain Rule	
	FUN-3.C Calculate derivatives of compositions of differentiable functions.	**SE/TE:** 159-161, 165-167
	3.2 Implicit Differentiation	
	FUN-3.D Calculate derivatives of implicitly defined functions.	**SE/TE:** 169-174, 175-177
	3.3 Differentiating Inverse Functions	
	FUN-3.E Calculate derivatives of inverse and inverse trigonometric functions.	**SE/TE:** 179-180, 184-185
	3.4 Differentiating Inverse Trigonometric Functions	
	FUN-3.E Calculate derivatives of inverse and inverse trigonometric functions.	**SE/TE:** 180-183, 184-185
	3.5 Selecting Procedures for Calculating Derivatives	**SE/TE:** 125-127, 130, 148-151, 152, 159-161, 165, 167, 169-174, 175-179, 180-183, 184-185
	3.6 Calculating Higher-Order Derivatives	
	FUN-3.F Determine higher order derivatives of a function.	**SE/TE:** 128, 130, 172, 176

SE = Student Edition **TE =** Teacher Edition

AP CALCULUS AB AND BC		Calculus Graphical, Numerical, Algebraic 6th/AP Edition, ©2020
Enduring Understanding	**Topic**	
UNIT 4 Contextual Applications of Differentiation		
CHA-3 Derivatives allow us to solve real-world problems involving rates of change.	4.1 Interpreting the Meaning of the Derivative in Context	
	CHA-3.A Interpret the meaning of a derivative in context.	**SE/TE:** 112-113, 130-131, 133-140, 141-146
	4.2 Straight-Line Motion: Connecting Position, Velocity, and Acceleration	
	CHA-3.B Calculate rates of change in applied contexts.	**SE/TE:** 134-139, 141-146
	4.3 Rates of Change in Applied Contexts Other Than Motion	
	CHA-3.C Interpret rates of change in applied contexts.	**SE/TE:** 139-140, 141-146
	4.4 Introduction to Related Rates	
	CHA-3.D Calculate related rates in applied contexts.	**SE/TE:** 259-263, 264-267
	4.5 Solving Related Rates Problems	
	CHA-3.E Interpret related rates in applied contexts.	**SE/TE:** 259-263, 264-267
	4.6 Approximating Values of a Function Using Local Linearity and Linearization	
	CHA-3.F Approximate a value on a curve using the equation of a tangent line.	**SE/TE:** 245-246, 254
LIM-4 L'Hospital's Rule allows us to determine the limits of some indeterminate forms.	4.7 Using L'Hospital's Rule for Determining Limits of Indeterminate Forms	
	LIM-4.A Determine limits of functions that result in indeterminate forms.	**SE/TE:** 456-462, 462-463
UNIT 5 Analytical Applications of Differentiation		
FUN-1 Existence theorems allow us to draw conclusions about a function's behavior on an interval without precisely locating that behavior.	5.1 U sing the Mean Value Theorem	
	FUN-1.B Justify conclusions about functions by applying the Mean Value Theorem over an interval.	**SE/TE:** 211-216, 217-219
	5.2 Extreme Value Theorem, Global Versus Local Extrema, and Critical Points	
	FUN-1.C Justify conclusions about functions by applying the Extreme Value Theorem.	**SE/TE:** 201-207, 208-210

AP CALCULUS AB AND BC		Calculus Graphical, Numerical, Algebraic 6th/AP Edition, ©2020
Enduring Understanding	**Topic**	
FUN-4 A function's derivative can be used to understand some behaviors of the function.	5.3 Determining Intervals on Which a Function is Increasing or Decreasing	
	FUN-4.A Justify conclusions about the behavior of a function based on the behavior of its derivatives.	**SE/TE:** 213-214, 217
	5.4 U sing the First Derivative Test to Determine Relative (Local) Extrema	
	FUN-4.A Justify conclusions about the behavior of a function based on the behavior of its derivatives.	**SE/TE:** 220-222
	5.5 U sing the Candidates Test to Determine Absolute (Global) Extrema	
	FUN-4.A Justify conclusions about the behavior of a function based on the behavior of its derivatives.	**SE/TE:** 201-207, 208-209
	5.6 Determining Concavity of Functions over Their Domains	
	FUN-4.A Justify conclusions about the behavior of a function based on the behavior of its derivatives.	**SE/TE:** 222-223, 229
	5.7 U sing the Second Derivative Test to Determine Extrema	
	FUN-4.A Justify conclusions about the behavior of a function based on the behavior of its derivatives.	**SE/TE:** 225-227, 229
	5.8 Sketching Graphs of Functions and Their Derivatives	
	FUN-4.A Justify conclusions about the behavior of a function based on the behavior of its derivatives.	**SE/TE:** 224-225, 229-230
	5.9 Connecting a Function, Its First Derivative, and Its Second Derivative	
	FUN-4.A Justify conclusions about the behavior of a function based on the behavior of its derivatives.	**SE/TE:** 226-227, 230
	5.10 Introduction to Optimization Problems	
	FUN-4.B Calculate minimum and maximum values in applied contexts or analysis of functions.	**SE/TE:** 232-238, 239-243
	5.11 Solving Optimization Problems	
	FUN-4.C Interpret minimum and maximum values calculated in applied contexts.	**SE/TE:** 232-238, 239-243

AP CALCULUS AB AND BC		Calculus Graphical, Numerical, Algebraic 6th/AP Edition, ©2020
Enduring Understanding	**Topic**	
(Continued) FUN-4 A function's derivative can be used to understand some behaviors of the function.	5.12 Exploring Behaviors of Implicit Relations	
	FUN-4.D Determine critical points of implicit relations.	**SE/TE:** 169-175, 175-177
	FUN-4.E Justify conclusions about the behavior of an implicitly defined function based on evidence from its derivatives.	**SE/TE:** 169-175, 175-177
UNIT 6 Integration and Accumulation of Change		
CHA-4 Definite integrals allow us to solve problems involving the accumulation of change over an interval.	6.1 Exploring Accumulations of Change	
	CHA-4.A Interpret the meaning of areas associated with the graph of a rate of change in context.	**SE/TE:** 291, 393-398, 399-401
LIM-5 Definite integrals can be approximated using geometric and numerical methods.	6.2 Approximating Areas with Riemann Sums	
	LIM-5.A Approximate a definite integral using geometric and numerical methods.	**SE/TE:** 287-288
	6.3 Riemann Sums, Summation Notation, and Definite Integral Notation	
	LIM-5.B Interpret the limiting case of the Riemann sum as a definite integral.	**SE/TE:** 289-291, 296-297
	LIM-5.C Represent the limiting case of the Riemann sum as a definite integral.	**SE/TE:** 292-295, 296-297
FUN-5 The Fundamental Theorem of Calculus connects differentiation and integration.	6.4 The Fundamental Theorem of Calculus and Accumulation Functions	
	FUN-5.A Represent accumulation functions using definite integrals.	**SE/TE:** 291, 293, 297, 311-312
	6.5 Interpreting the Behavior of Accumulation Functions Involving Area	
	FUN-5.A Represent accumulation functions using definite integrals.	**SE/TE:** 275-282, 283-286

AP CALCULUS AB AND BC		Calculus Graphical, Numerical, Algebraic 6th/AP Edition, ©2020
Enduring Understanding	**Topic**	
FUN-6 Recognizing opportunities to apply knowledge of geometry and mathematical rules can simplify integration.	6.6 Applying Properties of Definite Integrals	
	FUN-6.A Calculate a definite integral using areas and properties of definite integrals.	**SE/TE:** 299-302, 304-305
	6.7 The Fundamental Theorem of Calculus and Definite Integrals	
	FUN-6.B Evaluate definite integrals analytically using the Fundamental Theorem of Calculus.	**SE/TE:** 313-314, 317
	6.8 Finding Antiderivatives and Indefinite Integrals: Basic Rules and Notation	
	FUN-6.C Determine antiderivatives of functions and indefinite integrals, using knowledge of derivatives.	**SE/TE:** 348-350
	6.9 Integrating Using Substitution	
	FUN-6.D For integrands requiring substitution or rearrangements into equivalent forms:	
	(a) Determine indefinite integrals.	**SE/TE:** 348, 350-352, 354-355
	(b) Evaluate definite integrals.	**SE/TE:** 353, 355
	6.10 Integrating Functions Using Long Division and Completing the Square	
	FUN-6.D For integrands requiring substitution or rearrangements into equivalent forms:	
	(a) Determine indefinite integrals.	**SE/TE:** 350-352, 354-355
	(b) Evaluate definite integrals.	**SE/TE:** 353, 354-355
	6.11 Integrating Using Integration by Parts bc only	
	FUN-6.E For integrands requiring integration by parts:	
	(a) Determine indefinite integrals. bc only	**SE/TE:** 357-362, 362
	(b) Evaluate definite integrals. bc only	**SE/TE:** 357-362
	6.12 Integrating Using Linear Partial Fractions bc only	
	FUN-6.F For integrands requiring integration by linear partial fractions:	
	(a) Determine indefinite integrals. bc only	**SE/TE:** 376-378, 384-385
	(b) Evaluate definite integrals. bc only	**SE/TE:** 376-378, 384-385
LIM-6 The use of limits allows us to show that the areas of unbounded regions may be finite.	6.13 E valuating Improper Integrals bc only	
	LIM-6.A Evaluate an improper integral or determine that the integral diverges. bc only	**SE/TE:** 471-477, 479

AP CALCULUS AB AND BC		Calculus Graphical, Numerical, Algebraic 6th/AP Edition, ©2020
Enduring Understanding	**Topic**	
FUN-6 Recognizing opportunities to apply knowledge of geometry and mathematical rules can simplify integration.	6.14 Selecting Techniques for Antidifferentiation	**SE/TE:** 215-216, 218, 354-356, 362-364, 383-384
UNIT 7 Differential Equations		
FUN-7 Solving differential equations allows us to determine functions and develop models.	7.1 Modeling Situations with Differential Equations	
	FUN-7.A Interpret verbal statements of problems as differential equations involving a derivative expression.	**SE/TE:** 337, 372-375, 379-381, 383-384
	7.2 Verifying Solutions for Differential Equations	
	FUN-7.B Verify solutions to differential equations.	**SE/TE:** 338-341, 343, 346, 347, 366-371, 372-375, 379-382, 383-384
	7.3 Sketching Slope Fields	
	FUN-7.C Estimate solutions to differential equations.	**SE/TE:** 339-340, 344-345, 383
	7.4 Reasoning Using Slope Fields	
	FUN-7.C Estimate solutions to differential equations.	**SE/TE:** 339-341, 344-346, 380-382, 384 (#44)
	7.5 Approximating Solutions Using Euler's Method bc only	
	FUN-7.C Estimate solutions to differential equations.	**SE/TE:** 341-342, 345
	7.6 Finding General Solutions Using Separation of Variables	
	FUN-7.D Determine general solutions to differential equations.	**SE/TE:** 366-371, 372-375
	7.7 Finding Particular Solutions Using Initial Conditions and Separation of Variables	
	FUN-7.E Determine particular solutions to differential equations.	**SE/TE:** 366-371, 372-375
	7.8 Exponential Models with Differential Equations	
	FUN-7.F Interpret the meaning of a differential equation and its variables in context.	**SE/TE:** 367-371, 372-375, 379-382, 383-384
	FUN-7.G Determine general and particular solutions for problems involving differential equations in context.	**SE/TE:** 367-371, 372-375, 379-382, 383-384

AP CALCULUS AB AND BC		Calculus Graphical, Numerical, Algebraic 6th/AP Edition, ©2020
Enduring Understanding	**Topic**	
(Continued) FUN-7 Solving differential equations allows us to determine functions and develop models.	7.9 Logistic Models with Differential Equations bc only	
	FUN-7.H Interpret the meaning of the logistic growth model in context. bc only	**SE/TE:** 379-382, 383-384
UNIT 8 Applications of Integration		
CHA-4 Definite integrals allow us to solve problems involving the accumulation of change over an interval.	8.1 Finding the Average Value of a Function on an Interval	
	CHA-4.B Determine the average value of a function using definite integrals.	**SE/TE:** 300-301, 305
	8.2 Connecting Position, Velocity, and Acceleration of Functions Using Integrals	
	CHA-4.C Determine values for positions and rates of change using definite integrals in problems involving rectilinear motion.	**SE/TE:** 391-393, 399
	8.3 Using Accumulation Functions and Definite Integrals in Applied Contexts	
	CHA-4.D Interpret the meaning of a definite integral in accumulation problems.	**SE/TE:** 395, 396, 397, 399-401
	CHA-4.E Determine net change using definite integrals in applied contexts.	**SE/TE:** 393-394, 396, 399-401
CHA-5 Definite integrals allow us to solve problems involving the accumulation of change in area or volume over an interval.	8.4 Finding the Area Between Curves Expressed as Functions of x	
	CHA-5.A Calculate areas in the plane using the definite integral.	**SE/TE:** 403-404, 408-409
	8.5 Finding the Area Between Curves Expressed as Functions of y	
	CHA-5.A Calculate areas in the plane using the definite integral.	**SE/TE:** 406-407, 408-410
	8.6 Finding the Area Between Curves That Intersect at More Than Two Points	
	CHA-5.A Calculate areas in the plane using the definite integral.	**SE/TE:** 404-405, 408-409
	8.7 Volumes with Cross Sections: Squares and Rectangles	
	CHA-5.B Calculate volumes of solids with known cross sections using definite integrals.	**SE/TE:** 411-412, 419-423

AP CALCULUS AB AND BC		Calculus Graphical, Numerical, Algebraic 6th/AP Edition, ©2020
Enduring Understanding	**Topic**	
(Continued) CHA-5 Definite integrals allow us to solve problems involving the accumulation of change in area or volume over an interval	8.8 Volumes with Cross Sections: Triangles and Semicircles	
	CHA-5.B Calculate volumes of solids with known cross sections using definite integrals.	**SE/TE:** 412-414, 417, 420-423
	8.9 Volume with Disc Method: Revolving Around the x- or y-Axis	
	CHA-5.C Calculate volumes of solids of revolution using definite integrals.	**SE/TE:** 414-416, 422-423
	8.10 Volume with Disc Method: Revolving Around Other Axes	
	CHA-5.C Calculate volumes of solids of revolution using definite integrals.	**SE/TE:** 414, 421-422
	8.11 Volume with Washer Method: Revolving Around the x- or y-Axis	
	CHA-5.C Calculate volumes of solids of revolution using definite integrals.	**SE/TE:** 413, 420
	8.12 Volume with Washer Method: Revolving Around Other Axes	
	CHA-5.C Calculate volumes of solids of revolution using definite integrals.	**SE/TE:** 413-414, 420
CHA-6 Definite integrals allow us to solve problems involving the accumulation of change in length over an interval.	8.13 The Arc Length of a Smooth, Planar Curve and Distance Traveled bc only	
	CHA-6.A Determine the length of a curve in the plane defined by a function, using a definite integral. bc only	**SE/TE:** 425-428, 429-431
UNIT 9 Parametric Equations, Polar Coordinates, and Vector-Valued Functions bc only		
CHA-3 Derivatives allow us to solve real-world problems involving rates of change.	9.1 Defining and Differentiating Parametric Equations	
	CHA-3.G Calculate derivatives of parametric functions. bc only	**SE/TE:** 29-32, 33-35, 546, 549-551
	9.2 Second Derivatives of Parametric Equations	
	CHA-3.G Calculate derivatives of parametric functions. bc only	**SE/TE:** 546, 549-551
CHA-6 Definite integrals allow us to solve problems involving the accumulation of change in length over an interval.	9.3 Finding Arc Lengths of Curves Given by Parametric Equations	
	CHA-6.B Determine the length of a curve in the plane defined by parametric functions, using a definite integral. bc only	**SE/TE:** 547-549, 550-551
CHA-3 Derivatives allow us to solve real-world problems involving rates of change.	9.4 Defining and Differentiating Vector-Valued Functions	
	CHA-3.H Calculate derivatives of vector-valued functions. bc only	**SE/TE:** 556-559, 560-561

AP CALCULUS AB AND BC		Calculus Graphical, Numerical, Algebraic 6th/AP Edition, ©2020
Enduring Understanding	**Topic**	
FUN-8 Solving an initial value problem allows us to determine an expression for the position of a particle moving in the plane.	9.5 Integrating Vector- Valued Functions	
	FUN-8.A Determine a particular solution given a rate vector and initial conditions. bc only	**SE/TE:** 556-557, 560-561
	9.6 Solving Motion Problems Using Parametric and Vector-Valued Functions	
	FUN-8.B Determine values for positions and rates of change in problems involving planar motion. bc only	**SE/TE:** 556-559, 560-561
FUN-3 Recognizing opportunities to apply derivative rules can simplify differentiation.	9.7 Defining Polar Coordinates and Differentiating in Polar Form	
	FUN-3.G Calculate derivatives of functions written in polar coordinates. bc only	**SE/TE:** 563-568, 573-575
CHA-5 Definite integrals allow us to solve problems involving the accumulation of change in area or volume over an interval.	9.8 Find the Area of a Polar Region or the Area Bounded by a Single Polar Curve	
	CHA-5.D Calculate areas of regions defined by polar curves using definite integrals. bc only	**SE/TE:** 568-570, 573-575
	9.9 Finding the Area of the Region Bounded by Two Polar Curves	
	CHA-5.D Calculate areas of regions defined by polar curves using definite integrals. bc only	**SE/TE:** 568-570, 573-575
UNIT 10 Infinite Sequences and Series bc only		
LIM-7 Applying limits may allow us to determine the finite sum of infinitely many terms.	10.1 Defining Convergent and Divergent Infinite Series	
	LIM-7.A Determine whether a series converges or diverges. bc only	**SE/TE:** 486-488, 493-495
	10.2 Working with Geometric Series	
	LIM-7.A Determine whether a series converges or diverges. bc only	**SE/TE:** 486-488, 493-495
	10.3 The n^{th} Term Test for Divergence	
	LIM-7.A Determine whether a series converges or diverges. bc only	**SE/TE:** 487-488, 493-495, 518, 523
	10.4 Integral Test for Convergence	
	LIM-7.A Determine whether a series converges or diverges. bc only	**SE/TE:** 490-492, 493-495
	10.5 Harmonic Series and p-Series	
	LIM-7.A Determine whether a series converges or diverges. bc only	**SE/TE:** 528-530, 532, 533, 538

SE = Student Edition **TE =** Teacher Edition

AP CALCULUS AB AND BC		Calculus Graphical, Numerical, Algebraic 6th/AP Edition, ©2020
Enduring Understanding	**Topic**	
(Continued) LIM-7 Applying limits may allow us to determine the finite sum of infinitely many terms.	10.6 Comparison Tests for Convergence	
	LIM-7.A Determine whether a series converges or diverges. bc only	**SE/TE:** 519, 526
	10.7 Alternating Series Test for Convergence	
	LIM-7.A Determine whether a series converges or diverges. bc only	**SE/TE:** 531-533, 538-539
	10.8 Ratio Test for Convergence	
	LIM-7.A Determine whether a series converges or diverges. bc only	**SE/TE:** 520-521, 525
	10.9 Determining Absolute or Conditional Convergence	
	LIM-7.A Determine whether a series converges or diverges. bc only	**SE/TE:** 519-520, 524
	10.10 Alternating Series Error Bound	
	LIM-7.B Approximate the sum of a series. bc only	**SE/TE:** 508, 511, 514
LIM-8 Power series allow us to represent associated functions on an appropriate interval.	10.11 Finding Taylor Polynomial Approximations of Functions	
	LIM-8.A Represent a function at a point as a Taylor polynomial. bc only	**SE/TE:** 496-498, 502, 504, 507
	LIM-8.B Approximate function values using a Taylor polynomial. bc only	**SE/TE:** 496-498, 500-501, 507
	10.12 Lagrange Error Bound	
	LIM-8.C Determine the error bound associated with a Taylor polynomial approximation. bc only	**SE/TE:** 509, 511-512, 514
	10.13 Radius and Interval of Convergence of Power Series	
	LIM-8.D Determine the radius of convergence and interval of convergence for a power series. bc only	**SE/TE:** 517-524, 525-526
	10.14 Finding Taylor or Maclaurin Series for a Function	
	LIM-8.E Represent a function as a Taylor series or a Maclaurin series. bc only	**SE/TE:** 499-503, 504-505
	LIM-8.F Interpret Taylor series and Maclaurin series. bc only	**SE/TE:** 499-503, 504-505

AP CALCULUS AB AND BC		Calculus Graphical, Numerical, Algebraic 6th/AP Edition, ©2020
Enduring Understanding	**Topic**	
(Continued) LIM-8 Power series allow us to represent associated functions on an appropriate interval.	10.15 Representing Functions as Power Series	
	LIM-8.G Represent a given function as a power series. bc only	**SE/TE:** 488-492, 493-495