

Business Calculus | Table of Contents**Chapter 1: Linear Equations and Graphs****1.1 Linear Equations and Inequalities**

- Solve Linear Equations
 - Solve equations in one variable algebraically, variable just on one side
 - Solve equations in one variable algebraically, variable on both sides
- Interval Notation and Inequalities
 - Use interval notation
 - Use properties of inequalities
 - Solve simple inequalities in one variable algebraically
 - Solve compound inequalities in one variable algebraically

1.2 Graphs and Lines

- Cartesian Coordinates
 - Plot ordered pairs in a Cartesian coordinate system
- Graphing Linear Equations
 - Graph equations by plotting points
 - Find x -intercepts and y -intercepts
 - Find the equation of vertical and horizontal lines
- Find and Understand Slope
 - Find the slope of a line given two points
 - Understand the relationship between the slope and y-intercept of a line and its equation
- Find Linear Equations
 - Find equation of a line, in slope-intercept form, given slope and one point
 - Find equation, in slope-intercept form, of a line passing through two given points
 - Given slope and intercept, find the equation of a line and write it in standard form
- Applications of Linear Equations
 - Set up a linear equation to solve a real-world application

1.3 Linear Regressions

- Interpretations of Linear Functions
 - Interpret slope as a rate of change
 - Linear Regressions and Predictions
 - Find the linear regression equation given a list of data points
 - Make predictions using a line of best fit
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Chapter 2: Functions and Graphs

2.1 Functions

- Relations and Functions
 - Identify domain and range from a set of ordered pairs
 - Determine whether a relation represents a function
 - Use the vertical line test to identify functions
- Domain and Range
 - Find the domain of a function defined by an equation
 - Find the domain of a function defined by a graph
- Function Notation
 - Evaluate a function using function notation
 - Solve a function using function notation
 - Evaluate or solve a function from a table
 - Evaluate or solve a function from a graph
- Applications of Cost and Revenue Functions
 - Compute and relate profit, revenue, and cost functions

2.2 Elementary Functions and Graphs and Transformations

- Piecewise Functions and Graphs of Basic Functions
 - Define and graph six basic functions
 - Graph piecewise-defined functions
 - Evaluate piecewise-defined functions
- Transformations of Graphs
 - Graph functions using vertical and horizontal shifts
 - Graph functions using reflections about the x-axis and the y-axis
 - Graph functions using compressions and stretches

2.3 Quadratic Functions

- Quadratic Functions and the Parabola
 - Determine x- and y-intercepts of parabolas from a graph
 - Determine axis of symmetry and vertex of parabolas from a graph
 - Find the direction a parabola opens and its axis of symmetry and vertex from the general form of its equation
 - Find the domain and range of a quadratic function
 - Vertex Form of a Quadratic Function
 - Find the vertex and graph a parabola from a quadratic function given in vertex form
 - Write the equation of a quadratic function in standard form given the equation in general form
 - Quadratic Regression
 - Perform a quadratic regression with a calculator
 - Use the results of a quadratic regression to estimate values
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- Applications of Quadratic Functions
 - Use quadratic functions in break-even and profit-loss analysis

2.4 Polynomials and Rational Functions

- End Behavior of Polynomial Functions
 - Identify power functions and polynomial functions
 - Identify if a graph is a polynomial function
 - Determine end behavior
- Local Behavior of Polynomial Functions
 - Identify intercepts of polynomial functions in factored form
 - Understand the relationship between degree, turning points, and x-intercepts
 - Understand the intermediate value theorem
 - Use factoring to find zeros of polynomial functions
 - Identify zeros and their multiplicities from an equation or a graph
- Graphs and Applications of Rational Functions
 - Solve applied problems involving rational functions
 - Find the intercepts of a rational function
 - Graph rational functions
 - Find the equation of a rational function from a graph
- Polynomial Regression
 - Perform a polynomial regression with a calculator
- Applications of Polynomial Functions
 - Solve real-world applications of polynomial equations

2.5 Exponential Functions

- Evaluate and Write Exponential Functions
 - Identify exponential functions
 - Evaluate exponential functions
 - Find the equation of an exponential function given the initial value and a point
 - Find the equation of an exponential function when the initial value is not known
 - Applications of Exponential Functions and Base e
 - Find the equation of an exponential function in a word problem context
 - Calculate compound interest
 - Evaluate exponential functions with base e
 - Calculate continuous growth and decay
 - Exponential Function Graphs
 - Graph exponential functions
 - Graph exponential functions using transformations
 - Find the equation of an exponential function given a graph
 - Write an exponential function from a description
 - Exponential Regression
 - Perform an exponential regression with a calculator
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2.6 Logarithmic Functions

- Relate Logarithms and Exponents
 - Convert from logarithmic to exponential form
 - Convert from exponential to logarithmic form
- Evaluate Logarithmic Expressions
 - Evaluate logarithms with positive integer solutions
 - Evaluate logarithms with negative integer solutions
 - Use common logarithms
 - Use natural logarithms
- Logarithmic Function Graphs
 - Identify the domain of a logarithmic function
 - Graph logarithmic functions
 - Graph transformations of logarithmic functions
 - Write a logarithmic function from a description
- Basic Properties of Logarithms
 - Understand the basic properties of logarithms
 - Use the product rule for logarithms
 - Use the quotient rule for logarithms
 - Use the power rule for logarithms
- Rewrite Logarithmic Expressions Using Properties
 - Expand logarithmic expressions
 - Condense logarithmic expressions
 - Use the change-of-base formula for logarithms
- Solve Logarithmic Equations
 - Use the definition of a logarithm to solve logarithmic equations
 - Use logarithm properties and the definition of the logarithm to solve logarithmic equations
 - Use the one-to-one property of logarithms to solve logarithmic equations
- Logarithmic Regression
 - Perform a logarithmic regression with a calculator
- Applications of Logarithms
 - Applied logarithmic models

Chapter 3: Limits and the Derivative

3.1 Introduction to Limits

- Limits From a Graph or Table
 - Understand the limit of a function and evaluate a limit from a table
 - Evaluate limits graphically
 - Understand the properties of limits
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- Limits Analytically for Continuous and Piecewise Functions
 - Evaluate two-sided limits analytically for continuous functions
 - Evaluate limits analytically for piecewise functions
 - Evaluate limits analytically for absolute value functions
- Limits Analytically for Functions with Removable Discontinuities
 - Evaluate two-sided limits analytically for rational functions with removable discontinuities by factoring
 - Evaluate two-sided limits analytically for rational functions with removable discontinuities through expansion
 - Evaluate two-sided limits analytically for complex fractions with removable discontinuities
 - Evaluate two-sided limits analytically for rational functions that contain radicals with removable discontinuities

3.2 Infinite Limits and Limits at Infinity

- Infinite Limits
 - Evaluate limits analytically for functions with essential discontinuities
- Limits at Infinity
 - Evaluate limits of polynomial functions at infinity
 - Evaluate limits of rational functions at infinity
 - Evaluate limits of radical and exponential functions at infinity

3.3 Continuity

- Continuity and the Intermediate Value Theorem
 - Understand the definition of continuity
 - Distinguish between types of discontinuity
 - Understand and apply the intermediate value theorem
- Continuity of Piecewise Functions
 - Determine whether a piecewise function is continuous
 - Determine the value that makes a piecewise function continuous
- Rational and Quadratic Inequalities
 - Solve quadratic inequalities in one variable, graph the solution set, and express the solution set using interval notation
 - Solve inequalities that involve rational expressions, graph the solution sets, and express the solution set using interval notation

3.4 The Derivative

- Secant Lines and Average Rates of Change
 - Find the average rate of change given a function
 - Find the average rate of change given a table or graph
 - Find the average rate of change given a function and variable intervals
 - Tangent Lines and Instantaneous Velocities
 - Determine the sign of the slope of a line tangent to a function at a given point
 - Estimate the slope of the line tangent to a point on a curve
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- Estimate the instantaneous rate of change of a function from successively closer approximations
- The Definition of the Derivative
 - Understand the limit definition of the derivative
 - Use the limit definition to find the derivative of a polynomial function
 - Use the limit definition to find the derivative of a rational function
 - Use the limit definition to find the derivative of a function with a radical

3.5 Basic Differentiation Properties

- The Power Rule and the Sum and Difference Rules
 - Use the constant, constant multiple, and power rule for monomials
 - Apply the sum and difference rules to combine derivatives
- Use the Power Rule to Explore Tangent Lines
 - Find the equation of the line tangent to a polynomial at a point
 - Determine where a function has a horizontal tangent
 - Determine the points on a function when tangent lines have a given slope

3.6 Differentials

- Differentials and Finding Error
 - Compute a differential
 - Estimate the amount of propagated and relative error using differentials

3.7 Marginal Analysis in Business and Economics

- Marginal Cost and Revenue
 - Compute and interpret marginal cost
 - Compute and interpret revenue and marginal revenue
- Marginal Average Cost and Revenue
 - Compute average cost and revenue
 - Compute and interpret marginal average cost

Chapter 4: Additional Derivative Topics

4.1 Derivatives of Exponential and Logarithmic Functions

- Derivatives of Exponential Functions with Base e
 - Find the derivative of an exponential function with base e
 - Find the derivative of an exponential function with any base
 - Derivatives of Natural Log Functions
 - Find the derivative of a natural logarithmic function
 - Use properties of logarithms to find the derivative of a natural logarithmic function
 - Derivatives of Logarithmic Functions of Any Base
 - Find the derivative of a logarithmic function that is not base e
 - Use properties of logarithms to find the derivative of a logarithmic function that is not base e
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- Logarithmic Differentiation
 - Use logarithmic differentiation
 - Use logarithmic differentiation with all properties of logarithms

4.2 Derivatives of Products and Quotients

- The Product and Quotient Rules
 - Use the product rule to find the derivative of a function in the form $f(x)g(x)$
 - Use the quotient rule to find the derivative of a function in the form $f(x)/g(x)$
 - Use the product rule to find the derivative of a function in the form $f(x)g(x)h(x)$
 - Combine the product and quotient rules with polynomials
- The Product and Quotient Rules with Exponential Functions
 - Use product and quotient rules to find the derivative of exponential functions with base e
 - Use product and quotient rules to find the derivative of exponential functions with any base

4.3 The Chain Rule

- Using the Chain Rule
 - Use the chain rule with the power rule
 - Use the chain rule with the product and quotient rules

4.4 Implicit Differentiation

- Use Implicit Differentiation
 - Use implicit differentiation
 - Use implicit differentiation and the product rule
 - Use implicit differentiation to find the equation of a tangent line

4.5 Related Rates

- Related Rates for Volume or Area Problems
 - Use related rates to solve problems involving volume
 - Use related rates to solve problems involving area
- Related Rates in Other Applications
 - Use related rates to solve problems involving distance
 - Use related rates to solve problems involving angles or shadows

4.6 Elasticity of Demand

- Relative Rate of Change and Elasticity of Demand
 - Find the relative and percentage rate of change of a function
 - Compute elasticity of demand
 - Interpret elasticity of demand
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Chapter 5: Graphing and Optimization

5.1 First Derivative and Graphs

- First Derivative Test
 - Understand the relationship between the graph of a function and the sign of its derivative
 - Use the first derivative test to find local extrema from a graph
 - Use the first derivative test to find local extrema given a function
- The Graph of the Derivative Function
 - Estimate the value of a derivative at a point on a graph using a tangent line
 - Determine the open intervals where the first derivative is positive or negative from a graph
 - Determine the graph of the derivative function given the graph of a polynomial function

5.2 Second Derivative and Graphs

- Concavity and the Second Derivative Test
 - Determine concavity and find the inflection points from a graph of $f(x)$
 - Determine concavity and find the inflection points given a function
 - Use the second derivative test to find local extrema given a function

5.3 L'Hospital's Rule

- Using L'Hospital's Rule
 - Apply L'Hospital's Rule in the $0/0$ case
 - Apply L'Hospital's Rule in the (infinity/infinity) case
 - Determine when to apply L'Hospital's Rule

5.4 Curve Sketching Technique

- Sketch the Curve of a Function
 - Sketch the graph of a polynomial
 - Sketch the graph of a rational function
 - Sketch the graph of a function with a cusp

5.5 Absolute Maxima and Minima

- Extreme Value Theorem and Absolute Extrema
 - Understand the extreme value theorem
 - Locate local and absolute extrema from a graph
 - Locate critical points using derivatives
 - Locate absolute extrema

5.6 Optimization

- Applied Optimization Problems
 - Maximize or minimize area or volume
 - Minimize travel time
 - Maximize revenue
 - Minimize surface area
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- Optimization Problems in the Abstract
 - Maximize the area of an inscribed rectangle
 - Maximize and minimize quantities given an expression with two variables
 - Minimize distance of a function to a point
- Optimization of Lot Size and Quantity
 - Find the economic lot or economic order quantity size which minimizes total cost

Chapter 6: Integration

6.1 Antiderivatives and Indefinite Integrals

- Antiderivatives and the Integral
 - Find the antiderivative of a function
 - Understand integral notation and verify an indefinite integral
 - Understand the properties of indefinite integrals
 - Evaluate indefinite integrals involving constants or powers

6.2 Integration by Substitution

- Substitution and the Power Rule
 - Use substitution to find an indefinite integral with the power rule
 - Use substitution to evaluate a definite integral with the power rule

6.3 Differential Equations; Growth and Decay

- Basics of Differential Equations
 - Verify a solution of a differential equation
 - Identify the order of a differential equation
- Linear Differential Equations
 - Find a general solution to a linear differential equation
 - Find a particular solution to a linear differential equation
- Initial Value Problems
 - Verify a solution to a differential equation initial value problem
 - Solve a differential equation initial value problem
 - Solve applications of differential equation initial value problems
- Creating Direction Fields
 - Create a direction field for a first-order differential equation
 - Sketch a solution curve given a direction field
- Euler's Method
 - Use Euler's method to approximate the solution of a differential equation
- Differential Equations for Growth and Decay
 - Model and solve growth and decay applications with differential equations

6.4 The Definite Integral

- Left and Right Riemann Sums
 - Approximate the area under a curve using left-endpoint approximation
 - Approximate the area under a curve using right-endpoint approximation
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- Midpoint and Trapezoid Rule
 - Approximate the area under a curve using midpoint approximation
 - Approximate the area under a curve using trapezoidal approximation
- Defining Definite Integrals
 - Explain the terms integrand, limits of integration, and variable of integration, and describe when a function is integrable
 - Evaluate an integral using the definition of the definite integral and left- or right-endpoint approximations
- Calculating Definite Integrals with a Geometric Approach
 - Use a geometric formula to calculate a definite integral
 - Calculate net signed areas under a line using formulas for area of a triangle
 - Calculate total area under a function using geometric formulas
- Properties of the Definite Integral
 - Use the properties of the definite integral

6.5 The Fundamental Theorem of Calculus

- Integrals and Derivatives with the Fundamental Theorem of Calculus
 - Use the Fundamental Theorem of Calculus to find the derivative of an integral function
 - Use the Fundamental Theorem of Calculus and the chain rule to find a derivative
 - Use the Fundamental Theorem of Calculus with two variable limits of integration
- Evaluating Definite Integrals with the Fundamental Theorem of Calculus
 - Evaluate definite integrals with the Fundamental Theorem of Calculus for functions with positive integer exponents
 - Evaluate definite integrals with the Fundamental Theorem of Calculus for functions with rational exponents
 - Evaluate definite integrals with the Fundamental Theorem of Calculus and the power rule by simplifying
- Average Value of a Function
 - Find the average value of a function over an interval

Chapter 7: Additional Integration Topics

7.1 Area Between Curves

- Finding the Area of a Region Bounded by Two Curves
 - Find the area of a region between two linear functions
 - Find the area of a region bounded between a linear function and another function
 - Find the area of a region bounded between two curves
 - Finding the Area of Compound Regions
 - Find the area of a region bounded by two functions that cross
 - Find the area of a region bounded above by two different functions
 - Applications of Area Between Curves
 - Find and interpret the Gini index
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7.2 Volume of Revolution

- Volume Using the Disk Method
 - Use the disk method to find the volume of a solid of revolution around the x-axis with polynomials or roots

7.3 Applications in Business and Economics

- Income Streams
 - Find the total income for a continuous stream
 - Find the present value of a continuous stream
 - Find the future value of a continuous stream
- Consumer and Producer Surplus
 - Find the consumers' surplus at a certain price level
 - Find the producers' surplus at a certain price level
 - Find the equilibrium price and the consumers' and producers' surplus at that price

7.4 Integration by Parts

- Basic Integration by Parts with Indefinite Integrals
 - Use integration by parts when u and v are given
 - Use integration by parts for indefinite integrals

7.5 Integration Using Tables

- Integration Tables
 - Use a formula from an integration table to evaluate an integral
- Integration with Computer Algebra Systems
 - Use a computer algebra system to evaluate an integral
- Reduction Formulas
 - Use a table with reduction formulas to evaluate an integral

Chapter 8: Multivariable Calculus

8.1 Functions of Several Variables

- Introduction to Multivariable Functions
 - Evaluate a multivariable function
 - Sketch a point in three-dimensional space
 - Graph cross sections of a multivariable function

8.2 Partial Derivatives

- Partial Derivatives of a Function of Two Variables
 - Find the partial derivative of a function of two variables
 - Estimate the partial derivative of a function at a point from a graph or contour map
 - Total Differential
 - Use the differential to approximate the change in a function given the change in the inputs or to calculate maximum error
 - Partial Derivatives of a Function of Three or More Variables
 - Find the partial derivative of a function of three variables
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- Higher Order Partial Derivatives
 - Find the higher order partial derivatives of a function of two variables
- The Chain Rule for Functions of Several Variables
 - Use the chain rule for one independent variable
 - Use the chain rule for two independent variables
 - Use the generalized chain rule

8.3 Maxima and Minima

- Critical Points and the Second Derivative Test for Functions of Two Variables
 - Find critical points of a function of two variables
 - Use the second derivative test to classify critical points of a function of two variables
- Absolute Extrema and Applications for Functions of Two Variables
 - Find the absolute extrema of a function of two variables on a closed region
 - Solve maximization and minimization word problems with multiple variables

8.4 Maxima and Minima Using Lagrange Multipliers

- Lagrange Multipliers with One Constraint
 - Use Lagrange multipliers to find maximum and minimum values of a function of two variables with a single constraint
 - Use Lagrange multipliers to find maximum and minimum values of a function of three variables with a single constraint
- Lagrange Multipliers with Two Constraints
 - Use Lagrange multipliers to find maximum and minimum values of a function with two constraints

8.5 Double Integrals over Rectangular Regions

- Iterated Integrals and Properties of Double Integrals
 - Recognize and use some of the properties of double integrals
 - Evaluate a double integral over a rectangular region by writing it as an iterated integral
 - Evaluate a double integral over a rectangular region by reversing the order of integration
- Applications of Double Integrals Over Rectangular Regions
 - Find the volume under a surface
 - Find the average value of a function over a rectangular region

8.6 Double Integrals over More General Regions

- Double Integrals Over Nonrectangular Regions
 - Recognize when a function of two variables is integrable over a general region
 - Evaluate a double integral by computing an iterated integral over a region bounded by two lines and two functions
 - Double Integrals by Decomposing Regions or Changing the Order of Integration
 - Evaluate a double integral over a more complex region by decomposing the region
 - Simplify the calculation of an iterated integral by changing the order of integration
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- Applications of Double Integrals Over General Regions
 - Use double integrals to calculate the area of a general plane region
 - Use double integrals to calculate the volume of a region between two surfaces over a general plane region
 - Find the average value of a function over a general region

Chapter 9: Trigonometric Functions

9.1 Trigonometric Functions Review

- Angles as Rotations and Radian Measures
 - Identify the measure of positive and negative angles in standard position and the quadrant of the terminal side
 - Convert between degree and radian measure of an angle
 - Understand when two angles are coterminal
 - The Six Trigonometric Ratios
 - Use right triangles to evaluate sin, cos, and tan functions
 - Evaluate reciprocal trig functions using right triangles or a sin, cos, or tan function
 - Sine and Cosine Values in the First Quadrant
 - Understand sin and cos values on the unit circle
 - Find exact sin and cos values for angles in the first quadrant of the unit circle
 - Sine and Cosine Values with Reference Angles and a Calculator
 - Find the reference angle for a given angle
 - Use reference angles to evaluate sin and cos functions
 - Use reference angles to find coordinates on the unit circle
 - Evaluate sin and cos functions with a calculator
 - The Other Trigonometric Ratios on the Unit Circle
 - Find the sec, csc, tan, and cot values for angles in the first quadrant of the unit circle
 - Use reference angles to evaluate sec, csc, tan, and cot functions
 - Evaluate trigonometric functions with a calculator
 - Use Given Trigonometric Ratios to Find Other Ratios
 - Understand the relationship between the quadrant in which an angle falls and the signs of the trig functions of that angle
 - Use the pythagorean identity
 - Find the values of all trigonometric functions given coordinates on a unit circle
 - Find the values of all trigonometric functions given the value of one trigonometric function
 - Characteristics of Sin and Cos Graphs
 - Graph the sin function and understand its properties
 - Graph the cos function and understand its properties
 - Applications of Trigonometric Functions
 - Use sinusoidal functions to solve real-world applications
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9.2 Derivatives of Trigonometric Functions

- Derivatives with Trigonometric Functions
 - Find the derivative of a function with sine or cosine
 - Use the product or quotient rule to find a derivative with sine or cosine
 - Use the chain rule with trigonometric functions
- Applications of Trigonometric Derivatives
 - Compute derivatives of trigonometric functions in application problems

9.3 Integration of Trigonometric Functions

- Integration with Trigonometric Functions
 - Evaluate indefinite integrals involving trigonometric functions
 - Evaluate definite integrals involving trigonometric functions
 - Compute integrals of trigonometric functions in application problems

Chapter 10: Differential Equations

10.1 Separation of Variables

- Finding Differential Equation Solutions using Separation of Variables
 - Find a general solution to a differential equation composed of two polynomials using separation of variables
 - Find a specific solution to a differential equation composed of two polynomials using separation of variables
- Application Problems using Separation of Variables
 - Solve solution concentration problems using separation of variables
 - Solve Newton's law of cooling problems using separation of variables

10.2 First-Order Linear Differential Equations

- Recognizing and Solving First-order Linear Differential Equations
 - Identify first-order linear differential equations
 - Write first-order linear differential equations in standard form
 - Solve a first-order linear differential equation using an integrating factor
- Applications of First-order Linear Differential Equations
 - Solve first-order differential equation problems about compound interest
 - Solve first-order differential equation problems involving equilibrium price

Chapter 11: Taylor Polynomials and Sequences and Series

11.1 Taylor Polynomials

- Taylor and Maclaurin Polynomials
 - Recognize a Taylor series
 - Find the Taylor polynomials for a function at a value
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11.2 Taylor Series

- Representing Functions with Taylor and Maclaurin Series
 - Represent a function at a value with a Taylor series and determine the interval of convergence
 - Find the Maclaurin series for a function and show that the series converges

11.3 Operations on Taylor Series

- Finding the Maclaurin Series that Represents a Function
 - Find the Maclaurin series for a trigonometric function
 - Find the Maclaurin series for a logarithmic or exponential function
 - Find a Maclaurin series by differentiating another series

11.4 Approximations Using Taylor Series

- Estimating Function Values with Taylor and Maclaurin Series
 - Find the Maclaurin polynomials for a function
 - Estimate a function value using Taylor polynomials
 - Determine the error of an estimated function value using Taylor's theorem
 - Estimate a trigonometric function value using Maclaurin polynomials
- Alternating Series and the Alternating Series Test
 - Determine if an alternating series converges or diverges using the alternating series test
 - Estimate the remainder of an alternating series
 - Determine whether a series converges absolutely or conditionally

11.5 Sequences and Series

- Geometric Sequences
 - Find the common ratio of a geometric sequence
 - Write terms of a geometric sequence
 - Write a recursive formula for a geometric sequence
 - Write an explicit formula for a geometric sequence
 - Applications of Series
 - Solve application problems with arithmetic series
 - Solve application problems with geometric series
 - Find the equivalent fraction for a repeating decimal
 - Solve an annuity problem
 - Finite and Infinite Geometric Series
 - Find the sum of a finite geometric series
 - Determine if the sum of an infinite series is defined
 - Find the sum of an infinite geometric series
 - Newton's Method
 - Use Newton's method to approximate the root of a polynomial
 - Use Newton's method to approximate a square root
 - Determine when Newton's method does not work
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Chapter 12: Probability and Calculus

12.1 Improper Integrals

- Improper Integrals over Infinite Intervals
 - Evaluate an improper integral over an infinite interval
 - Evaluate an improper integral from negative infinity to positive infinity

12.2 Continuous Random Variables

- Probability Density Functions
 - Understand the properties of probability density functions
 - Compute probability using a continuous probability density function
- Cumulative Distribution Functions
 - Understand the properties of a cumulative distribution function
 - Find the cumulative distribution function given a probability density function

12.3 Parameters of Continuous Random Variables

- Mean and Median of a Probability Density Function
 - Find the mean of a continuous probability density function
 - Find the median of a continuous probability density function
- Other Parameters of Probability Density Functions
 - Find the variance and standard deviation of a continuous probability density function

12.4 Special Probability Distributions

- Uniform Distribution
 - Compute probability using the uniform distribution
 - Compute the mean, median, and standard deviation of the uniform distribution
 - Exponential Distribution
 - Compute probability using the exponential distribution
 - Compute the mean, median, and standard deviation of the exponential distribution
 - Normal Distribution
 - Understand the notation and interpret the parameters of a normal distribution
 - Compute z-scores and use them to compare values from different data sets
 - Use a table to find probabilities in a normal distribution
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