

AP Calculus Curriculum Sequence

Chapter 2 - Limits and Continuity

- Section 2.1 Rates of Change and Limits
- Section 2.2 Limits Involving Infinity
- Section 2.3 Continuity
- Section 2.4 Rates of Change and Tangent Lines

Chapter 3 - Derivatives

- Section 3.1 Derivative of a Function
- Section 3.2 Differentiability
- Section 3.3 Rules for Differentiation
- Section 3.4 Velocity and Other Rates of Change
- Section 3.5 Derivatives of Trigonometric Functions
- Section 3.6 Chain Rule
- Section 3.7 Implicit Differentiation
- Section 3.8 Derivatives of Inverse Trig Functions
- Section 3.9 Derivatives of Exponential and Log Functions

Chapter 4 – Applications of Derivatives

- Section 4.1 Extreme Values of Functions
- Section 4.2 Mean Value Theorem
- Section 4.3 Connecting f' and f'' with the Graph of f
- Section 4.4 Modeling and Optimizing
- Section 4.6 Related Rates

Chapter 5 – The Definite Integral

- Section 5.1 Estimating with Finite Sums
- Section 5.2 Definite Integrals
- Section 5.3 Definite Integrals and Antiderivatives
- Section 5.4 Fundamental Theorem of Calculus
- Section 5.5 Trapezoidal Rule

Chapter 6 – Differential Equations and Math Modeling

- Section 6.1 Slope Fields and Euler's Method
- Section 6.2 Antidifferentiation by Substitution
- Section 6.4 Exponential Growth and Decay

Chapter 7 – Applications of Definite Integrals

- Section 7.1 Integral as Net Change
- Section 7.2 Areas in the Plane
- Section 7.3 Volumes

Chapter 8 – Sequences, L'Hopital's Rule, and Improper Integrals

- Section 8.2 L'Hopital's Rule

