

1. Calculus with AP Preview

(1) Contents

- Limit, Continuity, and L'Hospital's Rule
- Derivative
- First and Second Derivative Theorem
- First and Second Derivative Application
- Derivative Application to Rate, Maximum and Minimum, Business Problems and Linear Approximation
- Integration
- Definite Integrals
- Improper Integrals
- Area and Volume Problems
- Mean Value Theorem, Exponential Growth/Decay Problems and Distance Traveled Problems
- Differential Equations
- Series

(2) Purpose

- Full understanding of calculus
- Prepare students for SAT AP Calculus

(3) Teaching Methodology

- Student centered approach

(4) Qualification of Students

- Completion of pre-calculus

(5) Textbook

- Teacher will send out handout to students one week prior to the class

(6) Hours/week

1/5 Hour/Week

(7) Maximum Number of Students

- 10

(8) Request of TA

NA