

CALCULUS AB

Pario-Lee Law

Session Outline

The purpose of this institute will be to familiarize participants with the current Calculus AB program and offer guidance, strategies, and resources for successfully teaching this program. The institute will cover all the major topics in the AB syllabus with an emphasis on graphical and numerical analyses along with traditional symbolic and verbal manipulations. Activities that promote student understanding will be emphasized and special attention will be given to assessment of written student responses. Along with the 2011 Free Response, released Multiple Choice (2003 & 2008) questions and other Free Response questions will be discussed. The TI 84+graphing calculator will be used as a vehicle of instruction.

Below is a brief outline of the topics that will be covered.

Introductions

College Board Packet

Overview of the AP Program

Sharing Strategies

Internet Resources (AP Central, etc.)

Prerequisites

Limits & Continuity

Derivatives

Applications of Derivatives (Curve sketching, optimization, related rates)

Definite Integrals

Antiderivatives & Indefinite Integrals (Riemann Sums & Trapezoidal Approx.)

Differential Equations

Slope Fields

Applications of Definite Integrals (area, volume)

Exam Review Strategies

2011 Exam Discussion

***Wherever applicable, other Free Response questions will be used to facilitate understanding of calculus topics.