

## Table of Contents

### Introduction

A Note on the Author,	i
Methodology and General Comments by the Author,	i
The Author's Teaching Environment,	ii
Marist Rotating Schedule,	ii
Marist Course Sequence Leading to Calculus,	ii
Vision Statement by the Marist Math Department,	iii
Standards for Mathematics,	iii
Mathematics Course Syllabus for AP Calculus,	iv
Suitable Texts,	vi
Other Resources,	vi
Helpful Hints for the AP Calculus AB Exam,	vii
Daily Assignments,	viii

### Problems of the Day

Problem of the Day #1,	1
Problem of the Day #10,	5
Problem of the Day #20,	11
Problem of the Day #30,	18
Problem of the Day #40,	23
Problem of the Day #50,	27
Problem of the Day #60,	30
Problem of the Day #70,	34
Problem of the Day #80,	43
Problem of the Day #90,	46

### Handouts

Handouts,	47
Answers to Handouts,	82

### Tests

Test #1,	97
Answers for Test #1,	101
Test #2,	102
Answers for Test #2,	104
Test #3,	105
Answers for Test #3,	108
Test #4,	111
Answers for Test #4,	115
Test #5,	118
Answers for Test #5,	120
Test #6,	122
Answers for Test #6,	125
Final Exam, Term I,	127

Answers for Final Exam, Term I, **135**  
Test #7, **139**  
Answers for Test #7, **141**  
Test #8, **143**  
Answers for Test #8, **145**  
Test #9, **147**  
Answers for Test #9, **148**  
Test #10, **149**  
Answers for Test #10, **150**  
Test #11, **152**  
Answers for Test #11, **153**  
Final Exam, Term II, **155**  
Answers for Final Exam, Term II, **160**  
Test #12, **162**  
Answers for Test #12, **163**  
Test #13, **164**  
Answers for Test #13, **166**

## **Labs**

Lab #1, Definition of Derivative, **169**  
Lab #2, Average vs. Instantaneous Velocity, **170**  
Lab #3, Local Linearity, **171**  
Lab #4, L'Hopital's Rule and Local Linearity, **173**  
Lab #5, Mean Value Theorem, **174**  
Lab #6, Area Under The Curve, **177**  
Lab #7, Velocity vs. Time, **178**

## **Review**

Review for the AP Exam, **181**  
AP Calculus Free-Response Questions, 1975-2002, **183**