

# AP Calculus Homework

2025-2026

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All of the homework recommendations come from *Larson, Hostetler, Edwards. Calculus of a Single Variable. 8th Edition*, the textbook used in class.

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## 1 Unit 1 Homework - Limits

### 1.1 Section 1.1 Homework

Page 47

**Suggested:** 1-11

### 1.2 Section 1.2 Homework

Page 54

**Suggested:** 1, 3, 5, 7, 9 – 23

### 1.3 Section 1.3 Homework

Page 67

**Suggested:** 5 – 39 odds, 45 – 65 odds (63 and 65 do analytic method only), 67 – 78, 113 – 117

### 1.4 Section 1.4 Homework

Page 78

**Suggested:** 1 – 19 odds, 25, 27, 33 – 51 odds (skip 49), 57, 58, 60, 83, 84, 86

## 1.5 Section 1.5 Homework

Page 88

**Suggested:** 1 – 47 odds (skip 7, 23, 25), 55, 67 – 70

## 1.6 Section 3.5 Homework

**This is part of the Chapter 1 Exam**

Page 205

**Suggested:** 1, 3-8, 15-45 odds, 55, 59, 61, 65, 67, 69

## 2 Unit 2 Homework - Derivatives

Please see the **Derivative/Antiderivative Rules** sheet that is included for things that will be on the test.

### 2.1 Section 2.1 Homework

Page 104

**Suggested:** 5-25 odds, 29, 31-35 odd, 41, 81 – 86 (25 and 29 do part “a” only)

### 2.2 Section 2.2 Homework

Page 115

**Suggested:** 3 – 61 odds, 83 – 94 (53 and 55 do part “a” only)

### Antiderivatives, Special Assignment

The antiderivative section is not until chapter 4. However, I believe it is best introduced with derivatives. Please see the attached assignment for antiderivatives.

**This will be on the exam.**

### 2.3 Section 2.3 Homework

Page 126

**Suggested:** 1 – 53 odds, 63 – 75 odds, 81, 93 – 101 odds, 125, 127, 129 – 134 (skip 3, 9, 27,

35, 37, 69, but on 63, 65 and 67 do part “a” only)

## 2.4 Section 2.4 Homework

Page 137

**Suggested:** 7 – 31 odds, 41 – 89 odds 97 – 99 (67 – 73 do part “a” only, 75 and 77 find the derivative using your calculator)

## 2.5 Section 2.5 Homework

Page 146

**Suggested:** 1 – 15 odds, 21 – 37 odds 45, 47, 49, 57 (skip 31)

## 2.6 Section 2.6 Homework

Page 154

**Suggested:** 1-7 odds, 12, 15, 19, 21 – 24, 28, 31, 33, 43

**Required:** 3, 15, 19, 23, 27

## Initial Value Problems Homework

I have created an Initial Value Problems (IVP) Homework assignment. I have printed copies of these in class. However, if you did not get one, please see the attached document.t

### 3 Unit 3 Homework - Applications of Differentiation (Curve Sketching and Optimization)

#### 3.1 Section 3.1 Homework

Page 169

**Suggested:** 3, 5, 7, 13 – 33 odds (skip 31), 55 – 58, 63 – 66

Question 55 is a simple yes or no for (a) and (b), but I would like you to really think about it for a minute. I am not requiring you to write a sentence, but you should try to articulate your answer to me (in writing) or to someone else in the class.

#### 3.2 Section 3.2 Homework

Page 176

**Suggested:** 1, 3, 9, 11, 15, 17, 29, 37 – 45 odds

#### 3.3 Section 3.3 Homework

Page 186

**Suggested:** 1 – 45 odds (skip 31 and 43)

#### 3.4 Section 3.4 Homework

Page 195

**Suggested:** 1 – 21 odds, 29, 31, 37, 53, 55

### 3.5 Section 3.5 Homework

Recall that we discussed S3.5 during Chapter 1.

### 3.6 Section 3.6 Homework

Page 215

**Suggested:** 1 – 6, 19, 21, 23, 27, 29, 31

For questions 21 and 27 I expect a full sign chart as well as a sketched graph.

### 3.7 Section 3.7 Homework

Page 223

**Suggested:** 2(b and c only), 5, 7, 8, 9, 13, 15, 19, 20, 21(c only), 24, 25(c only), 29, 30, 33

### 3.8 Section 3.8 Homework

We will revisit S3.8 if there is time remaining at the end of the year. It covers Newton's Method, a very important applied mathematics concept but one that is frequently overlooked in Calculus 1 due to time constraints.

## 4 Unit 4 Homework - Differentials (3.9) and Integration

### Section 3.9 Homework

This is part of the Chapter 4 Exam

Page 240

**Suggested:** 1, 3, 7, 9, 11-19 odd, 21, 23, 27-33 odd, 35-45 odd, 53-57 odd

### 4.1 Section 4.1 Homework

Page 255

**Suggested:** 5-41 odds, 47, 49b, 51b, 53b, 55-63 odds, 77, 87-92

### 4.2 Section 4.2 Homework

Page 267

**Suggested:** 27, 29, 63 (midpoint), 65 (midpoint), 47-50, 51-56

### 4.3 Section 4.3 Homework

Page 278

**Suggested:** 13-47 odds, 48, 49

#### 4.4 Section 4.4 Homework

Page 291

**Suggested:** 1-41 odds, 47-51 odds, 54-60, 73-91 odds

#### 4.5 Section 4.5 Homework

Page 304

**Suggested:** 7-97 odds, 105

#### 4.6 Section 4.6 Homework

Page 314

**Suggested:** 1-19 odds (trapezoid rule only)

### 5 Unit 5 Homework - Logarithmic, Exponential, and Other Transcendental Functions

#### 5.1 Section 5.1 Homework

Page 329

**Suggested:** 7-10, 19-33 odds, 41-85 odds, 93, 95, 103, 104

## 5.2 Section 5.2 Homework

Page 338

**Suggested:** 1-41 odds, 47-53 odds, 61, 63, 67-73 odds, 75 & 77 (use a calculator), 78, 89,  
97-100

## 5.3 Section 5.3 Homework

Page 347

**Suggested:** 1-7 odds, 9-16, 1-43 odds, 71-75 odds, 95, 101-104

## 5.4 Section 5.4 Homework

Page 356

**Suggested:** 1-13 odds, 33-61 odds, 73, 77, 85-109 odds, 113, 115, 117 (with calculator)

## 5.5 Section 5.5 Homework

Page 366

**Suggested:** 1-4, 5, 7, 15-20, 21-51 odds, 53-56, 57-71 odds, 101-103, 105, 106

## 5.6 Section 5.6 Homework

Page 377

**Suggested:** 5-16, 17-33 odds, 41-63 odds, 77

## 5.7 Section 5.7 Homework

Page 385

**Suggested:** 1-17 odds, 21-31 odds, 35, 37, 41, 43, 45, 63, 65, 67

## 6 Unit 6 Homework - Differential Equations

### 6.1 6.1 Homework

Page 409

**Suggested:** 1, 3, 5, 19, 21, 37 – 47 odds

### 6.2 6.2 Homework

Page 418

**Suggested:** 1 – 47 odds, 59

### 6.3 6.3 Homework

Page 429

1 – 25 odds, 53

## 7 Unit 7 Homework - Applications of Integration

### 7.1 7.1 Homework

Page 452

**Suggested:** 1 – 35 odds (skip 13a and 15), 53, 55

### 7.2 7.2 Homework

Page 463

**Suggested:** 1 – 39 odds (skip 29), 61, 62, 63