

Calculus I (9th edition textbook) Assignments

Note: “eoo” means “every other odd” problem. Items in **bold** are for advanced track students.

Assignments below are not mandatory for every student. Adjustments are allowed for a variety of reasons, including time constraints. Contact Dana@chalkdust.com with questions or comments.

Since organizational skills contribute to student success in math, I encourage students to organize assignments using the guidelines below. You are welcome to alter the guidelines as you wish, but thought you'd like to know what I do in a classroom environment.

1. Place homework on lined paper, either loose leaf or in a notebook.
2. Place your name and the section number at the top of each page.
3. Work on one side of each sheet of paper.
4. Show all work necessary to complete each problem, including a diagram wherever applicable.
5. Problem numbers should appear in the left margin and the problem should appear to the right.
6. Copy each problem as it appears in the text except for word problems.
7. Problems must be in sequential order and arranged vertically.
8. Use only a pencil.
9. A second column may be used on a page by drawing a second margin line (with a ruler) down the middle of the page.

Notes:

1. Chapter tests are not printed in the textbook, so test problems are taken from the Review Exercise problem set. Therefore, please review for tests by going over homework problems.
2. I suggest there be no time constraints on tests. In fact, if necessary, allow more than one day for the completion of tests.
3. Allow 3-4 days for the completion of each section. That is, watch video on the first day and begin the assignment. Continue to work on the assignment, referring back to the video and to examples in the textbook for the next 2 or 3 days until the assignment is complete. There are 42 sections in the textbook so allowing 4 days per section is not going to delay the completion of the course in a normal school year.
4. The front and rear overleaf of the textbook contains quite a bit of handy quick-reference information. Make liberal use of that information on homework and on tests. [There are too many complicated formulas to expect all of them to be memorized. Besides, learning calculus is more about how you use and interpret the formulas than it is about recalling them correctly.]

Chapter P

- P.1 1-23 odd, 29, 37, 45, 53, 63, 65, 69, 75, 77
P.2 1-11 odd, 21, 23, 29, 33, 37, 39, 53, 57, 63, 64
P.3 1, 3, 5, 9, 11, 16, 19, 29, 33, 35, 41, 43, 47
P.4 1-5, 8, 10, 12, 13, 15

Chapter P Test: Review Exercises, page 37

Problems 1, 2, 8, 13, 14, 22, 25, 29(b), 30(b), 38, 40, 47(a), 48

Chapter 1

- 1.1 1-5
1.2 1, 3, 5, 15, 18, 19, 20, 25, 26, 27, 35, 41, 43, 47, 49, 53, 71-74
- see information about the delta / epsilon definition of limit -
1.3 1-33 odd, 37, 41-55 odd, 65, 69, **103, 105, 117, 121**
1.4 1-13 odd, 17-23 odd, 27, 35-51 odd, 63, 67, 77, 79, 83, 87, 89
1.5 1,3, 5-8, 13-57 odd, 67, **68, 73**

Chapter 1 Test: Review Exercises, page 91

Problems 7, 9, 15, 21, 33, 34, 35, 39, 53, 57, 61, 65, 67, 75

Chapter 2

- 2.1 1-4, 13, 17, 19, 25, 27, 29, 39-42, 61, 64, 83-88
2.2 1-29 eoo, 31-47 eoo, 55, 59-69 odd, 77, 83, 87, 91, 97, 99, **113, 115**
2.3 1-21 odd, 25-31 odd, 39-45 odd, 63, 65, 69, 83, 87, 97, 101
2.4 1-27 odd, 43-53 odd, 67, 69, 75, 77, 79, 91, 95
2.5 1-15 odd, 21-31 odd, 33, 35, 59, 63
2.6 1-7 odd, 11, 13, 17, 25, 27, 33, 44

Chapter 2 Test: Review Exercises, page 158

Problems 1, 5, 9, 19, 21, 25, 39, 41, 45, 49, 61, 73, 75, 103, 109, 113, 115

[You may look up derivative formulas for trig ratios. A good reference is the text overleaf.]

Chapter 3

- 3.1 3-13 odd, 17-33 odd, 37, 57, 59, **65, 67**
3.2 1-19 odd, 27, 29, 39, 46, 49, **53**
3.3 1-37 odd, 61, 63, **88**
3.4 1-11 odd, 19-31 odd, 37, 39, 41, 45, 63, 65, 67, **73, 77, 79**
3.5 1-5, 13-29 odd, 35, 37, 59, 61, 63, 65, **88, 93**
3.6 1, 3, 5-29 eoo, 37, 38, 41, 45, **49, 61, 63, 77a,b,c,e**
3.7 3-29 odd, **39, 43, 47, 59**
3.8 5, 7, 9, 15, 17, 19, 25, **29a-d, 35**
3.9 1, 3, 7-15 odd, 21-29 odd, **31, 33, 43**

Chapter 3 Test: Review Exercises, page 242

Problems 3, 5, 8, 17, 23, 29, 37, 39, 41, 49, 59, 67, 79, 83, 87, 97, 101

Chapter 4

- 4.1 1-23 odd, 35, 39, 49, 50, 57-65 odd, **73, 74, 77, 78, 81**
- 4.2 1, 3, 7, 9, 13, 15, 17, 19, 23, 27, 37, 39, 41, 43, 45, 49, 53, 57, 61, **67, 71**
- 4.3 3-27 odd, 35-43 odd, **57, 60**
- 4.4 1-25 eoo, 27, 31, 35, 37, 39, 40, 51, 55, 65, 67, 69, **81, 83**
- 4.5 1, 3, 5, 11-41 eoo, 47, 49, 53, 63, 65, 67, 71, 75, 77, 83, 91, 93, 97, 99
- 4.6 1-19 odd, 23

Chapter 4 Test: Review Exercises, page 318

Problems 1, 3, 7, 9, 13, 25, 37, 41, 44, 49, 59, 65, 69, 87, 88, 91

Chapter 5

- 5.1 3, 5, 7-10, 11, 15, 19-35 odd, 39-65 odd, 77, 81, 83, 89, 91, **101-105 odd**
- 5.2 1-37 odd, 41, 43, 47, 53-59 odd, 73-79 odd, **97, 101**
- 5.3 1-7 odd, 9-16, 13-35 odd, 41, 43, 55-65 odd, **87-93 odd**
- 5.4 1-23 odd, 25-28, 29, 31, 37-59 odd, 61-73 eoo, 81, 85, **87, 99, 101, 105, 109, 133, 135**
- 5.5 1-13 odd, 15-18, 19-51 odd, 63-69 odd, 75-79 odd, 95a-b, **97, 99, 107**
- 5.6 5-29 odd, 37, 39, 43-49 odd, **57, 59, 63, 97**
- 5.7 1-17 odd, 25-35 odd, 39, 41, 51, 71, 73
- 5.8 1-25 eoo, 31, 45-73 eoo, 79, 83, **87, 91, 105, 107**

Chapter 5 Test: Review Exercises, page 401

Problems 4, 5, 7, 11, 15, 17, 22, 27, 33, 39, 43, 47, 53, 61, 63, 67, 69, 77, 79, 88, 92, 94

Chapter 6

- 6.1 1-17 odd, 21-31 odd, 35, 37, 41, 45, 49, 61a-b, 63a-b, 73, 75
- 6.2 1-13 odd, 17-27 odd, 33-37 odd, 41, 43-51 odd, **63, 64, 71**
- 6.3 1-21 odd, 25, 31, 39, 41, 45, 48, 53, 55, 71-74, 84
- 6.4 1-11 odd, 17, 19, 21, 35a-b, 43-46, 47, 49, 51, 61, 65

Chapter 6 Test: Review Exercises, page 443

Problems 1, 3, 7, 13, 19, 23, 25, 30, 37, 47, 51, 55, 61