

Suggested Exercises for 2012 – 2013 Fall Semester MATH 1350 Survey of Calculus

(Chosen from the 12th Edition of the textbook)

The goal of the course is for you to be able to solve the 292 exercises on this list.

Section	Suggested Exercises Those requiring a computer are in [brackets].
3-1 Introduction to Limits	7, 8, 13, 15, 27, 29, 39, 41, 45, 49, 51, 67, 73
3-2 Infinite Limits and Limits at Infinity	1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 17, 19, 21, 23, 25, 27, 31, [35], 39, 41, 51, 61, 67, 73
3-3 Continuity	11, 12, 13, 14, 27, 29, 35, 37, 39, 41, 43, 57, 73
3-4 The Derivative	1, 13, 19, 21, 27, 29, 31, 32, 33, 34, 35, 36, 39, 45, 46, 71
3-5 Basic Differentiation Properties	9, 11, 27, 29, 37, 41, 43, 45, 47, 51, 55, 73, 89
3-7 Marginal Analysis in Business and Economics	1, 5, 9, 13, 15, 25, 33, 35, 39
4-1 The Constant e and Continuous Compound Interest	[3], [5], [11], [17], [19], [21], [25], [27], [31], [33], [35]
4-2 Derivatives of Exponential and Logarithmic Functions	1, 3, 15, 17, 19, 27, 28, 35, 37, 39, 41, [51], [53]
4-3 Derivatives of Products and Quotients	11, 13, 17, 23, 25, 47, 53, 57, 61, 77, 83, 87
4-4 The Chain Rule	25, 29, 35, 41, 45, 47, 48, 55, 63, 91, [95]
5-1 First Derivative and Graphs	1, 3, 5, 6, 9, 11, 13, 15, 17, 13, 21, 23, 35, 37, 51, 53, 55, 59, 77, 89, 97
5-2 Second Derivative and Graphs	1, 3, 7, 9, 15, 16, 19, 25, 35, 39, 27, 67, 77, 78, 79, 80, 85, 87
5-5 Absolute Maxima & Minima	1, 9, 21, 23, 29, 33, 41, 57, 63, 65
5-6 Optimization	1, 3, 5, 7, 9, 11, 23, 25, 26, 30
6-1 Antiderivatives, Indefinite Integrals	1, 9, 11, 15, 17, 21, 31, 33, 41, 45, 47, 49, 51, 57, 85, 87
6-2 Integration by Substitution	3, 7, 9, 11, 15, 19, 21, 23, 25, 35, 55, 57, 69, 71, 75
6-4 The Definite Integral	5, 7, 9, 11, 13, 17, 27, 35, 39, 43, 45, 47, 49, 67
6-5 The Fundamental Theorem of Calculus	3, 5, 11, 13, 15, 17, 19, 23, 27, 29, 31, 33, 37, 41, 43, 47, 61, 63, 67, 81, 84
7-1 Area between Curves	1, 3, 9, 13, 17, 19, 23, 33, 49, 53, 63, 65, 81, 89
7-2 Applications in Business and Economics	1, 3, 9, 21, 23, 25, 27, 29, 31, 35, 37, 39, 43, 45, 47, 49, 51