Fall 2016 Math 2B
Suggested Homework Problems

Sections	Topics covered	Problems
4.9	Antiderivatives (Review)	2, 4, 8, 9, 11, 13, 15, 17, 19, 22, 27, 33, 38, 47, 62, 68, 78
5.1	Area and distances	1, 2, 5, 13, 18, 21
5.2	The definite integral	1, 3, 5, 7, 18, 20, 21, 24, 34, 38, 40, 53, 58, 63, 64
5.3	Fundamental theorem of calculus	2, 8, 10, 12, 14, 16, 18, 22, 24, 26, 29, 30, 34, 36, 41, 43, 60, 62, 74, 75
5.4	Indefinite integrals	6, 8, 10, 15, 16, 18, 26, 30, 31, 33, 34, 44, 46, 52, 54, 60, 67
5.5	Substitution rule	4, 8, 9, 10, 11, 16, 18, 19, 21, 28, 32, 34, 35, 38, 54, 59, 71, 73, 82, 88
6.1	Area between curves	1, 3, 5, 7, 10, 14, 17, 19, 22, 25, 58
6.2	Volumes	4, 6, 12, 16, 48, 49, 56, 58, 68
6.5	Average value of a function	2, 4, 5, 10
7.1	Integration by parts	5, 6, 11, 12, 15, 18, 24, 26, 40, 50, 52, 74
7.2	Trigonometric integrals	2, 4, 20, 22, 28, 42, 62
7.3	Trigonometric substitution	6, 13, 14, 16, 23, 26
7.4	Integration by partial fractions	7, 10, 12, 20, 24, 38
7.8	Improper integrals	10, 12, 16, 23, 24, 26, 27, 33, 36, 58, 62
7.5	Strategy for integration	2, 3, 7, 18, 22, 25, 27, 28, 30, 42
8.1	Arc length	10, 12, 14, 34
11.1	Sequences	4, 10, 14, 26, 31-36 all, 47, 50, 55, 72, 73, 80
11.2	Series	22, 24, 25, 26, 30, 33, 34, 37, 40, 42, 43, 46, 60, 62, 72
11.3	Integral test	6, 8, 21, 26, 32
11.4	Comparison tests	6, 13, 14, 21, 23, 28, 31, 38, 43
11.5	Alternating series test	5, 10, 12, 14, 16, 32
11.6	Absolute convergence, Ratio and root tests	2, 6, 10, 14, 15, 20, 25, 26, 28, 31, 43
11.7	Strategy for testing series	2-32 all even
11.8	Power series	3, 4, 5, 7, 11, 15, 18, 20
11.9	Representing functions as power series	4, 8, 16, 18, 26
11.10	Taylor series and Maclaurin series	12, 14, 20, 22, 23, 24