

Math 113 Homework Assignments – Winter 2010

Week	Title	Section	Assigned Exercises
Jan. 4-8	Areas between Curves	6.1	2, 3, 9, 13, 21, 27, 28, 29, 42, 45, 51, 53
	Volumes	6.2	7, 9, 11, 12, 16, 25, 26, 34, 35, 43, 49, 51,
	Volumes, Volumes by Cylindrical Shells	6.2/6.3	6.2: 57, 58, 61, 63, 67 6.3: 2, 5, 13, 17, 25, 29, 41
Jan. 11-15	Work	6.4	7, 9, 13, 17, 18, 21
	Average Value of a Function	6.5	6, 7, 10, 13, 19, 20, 23
	Integration by Parts	7.1	3, 4, 9, 10, 15, 17, 20, 35
Jan. 18-22	Holiday		
	Integration by Parts, Trigonometric Integrals Trigonometric Integrals, Trigonometric Substitution	7.1/7.2 7.2/7.3	7.1: 44, 45, 47, 67 7.2: 3, 6, 7, 13, 19 7.2: 20, 21, 23, 26, 33, 42, 43, 56 7.3: 4, 5, 9, 11
Jan. 25-29	Trigonometric Substitution, Integration by Partial Fractions	7.3/7.4	7.3: 5, 13, 18, 24, 27, 31, 32, 39 7.4: 1, 2, 5, 6
	Integration by Partial Fractions	7.4	9, 12, 15, 17, 24, 29, 50, 55, 58, 70
	Strategy for Integration	7.5	3, 9, 12, 14, 15, 23, 31, 42, 45, 58, 79, 80
	Review		
Exam 1	Jan. 29-Feb. 1 with Feb. 2 as the late day		
Feb. 1-5	Approximate Integration	7.7	
	Approximate Integration	7.7	1, 9, 10, 21, 23, 26, 42, 43, 44, 45, 46, 47, 48
	Improper Integrals	7.8	5, 7, 11, 13, 18, 21, 26, 27, 29, 32, 35, 40
Feb. 8-12	Improper Integrals, The Logarithm Defined as an Integral	7.8/App. G	7.8: 49, 50, 52, 58, 60, 78
	The Logarithm Defined as an Integral	App. G	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
	Arc Length	8.1	3, 4, 5, 6, 8, 10, 11, 12, 33, 40
Feb. 15-19	Holiday (Feb. 16 is Monday instruction)		
	Area of a Surface of Revolution	8.2	1, 3, 5, 10, 11, 12, 15, 16, 21, 25, 30
	Applications to Physics and Engineering Physics and Engineering/Sequences	8.3 8.3/11.1	5, 7, 9, 10, 15, 22, 26, 27, 31, 33 8.3: 39, 40, 41, 42, 46, 48 11.1: 3, 5, 6, 9, 10, 11, 13, 15
Feb. 22-26	Sequences	11.1	18, 19, 27, 28, 29, 35, 36, 39, 43, 47, 48, 53, 56, 58, 61, 69, 74, 78
	Series	11.2	3, 7, 9, 11, 13, 15, 17, 21, 22, 24, 27, 29, 31, 33, 35, 36, 40, 41, 47, 48, 55, 58, 65, 71
	The Integral Test and Estimates of Sums Review	11.3	1, 2, 3, 6, 7, 9, 11, 13, 15, 17, 18, 19, 24, 27, 30, 31, 32, 33, 39, 40
Exam 2	Feb. 26-March 1 with March 2 late day		
March 1-5	The Comparison Tests	11.4	1, 2, 5, 8, 10, 15, 17, 25, 31, 33, 36, 37, 40, 42, 44, 45
	Alternating Series	11.5	4, 5, 6, 7, 11, 13, 16, 17, 21, 24, 28, 33
	Absolute Convergence, Ratio and Root Tests	11.6	1, 2, 3, 4, 8, 10, 13, 19, 21, 25, 26, 27, 28, 29, 31, 38
March 8-12	Strategy for Testing Series	11.7	8, 11, 14, 17, 18, 23, 26
	Power Series	11.8	3, 4, 7, 15, 16, 23, 24, 27, 28, 29, 30, 35, 37
	Representations of Functions as Power Series	11.9	5, 8, 11, 13, 15, 21, 22, 23, 27, 28, 32, 33, 38
March 15-19	Taylor and Maclaurin Series	11.10	Memorize all boxed formulas and theorems in Section 11.10
	Taylor and Maclaurin Series	11.10	2, 3, 4, 5, 6, 7, 9, 11, 14, 15, 17, 18, 19, 20
	Taylor and Maclaurin Series	11.10	24, 27, 33, 34, 35, 36, 37, 41, 42, 43, 49, 53, 56, 57, 61, 62, 63, 64, 68
March 22-26	Applications of Taylor Polynomials	11.11	1, 2, 5, 9, 10, 11, 18, 19, 25, 26, 28, 29, 33, 39
	Curves Defined by Parametric Equations	10.1	4, 7, 9, 13, 21, 24, 27, 28, 33, 42, 47
	Calculus with Parametric Curves Review	10.2	2, 5, 9, 11, 17, 25, 32, 41, 44, 45, 47, 65
Exam 3	March 26-29 with late day 30		
March 29-April	Polar Coordinates	10.3	2, 3, 4, 5, 6, 9, 10, 11, 12, 17, 18, 25, 33, 35, 37, 39, 50, 59, 63
	Areas and Lengths in Polar Coordinates	10.4	5, 7, 11, 16, 21, 27, 42, 47
	Conic Sections	10.5	5, 7, 9, 14, 15, 18, 19, 27, 32, 33, 37, 38, 47, 48
April 5-9	Conic Sections in Polar Coordinates Review Review	10.6	3, 5, 7, 11, 13, 15, 17, 18
April 12-16	Review- Reading days are April 14, 15		
April	Final Exam		