

Sections and problem numbers refer to the text:
Thomas' Calculus: Early Transcendentals (14th ed.), Haas, Heil, and Weir (Pearson)

Required problems programmed into the publisher associated online HW system MML (My Math Lab) are in **boldface**, listed along with additional suggested problems for extra practice.

Problems with an asterisk * are more challenging.

Section	Topics	Exercises
5.5	Review of Indefinite Integrals	3, 11, 18, 21, 25, 29, 37, 39, 47, 55, 59, 61
5.6	Review of Definite Integrals	3, 7, 9, 11, 29, 31, 33, 37, 41
7.1	The Logarithm Defined as an Integral	3, 5, 7, 11, 14, 19, 23, 30, 31, 37, 38, 61
7.3	Hyperbolic Functions	1, 2, 3, 4, 5, 6, 11, 12, 13, 15, 17, 41, 43, 75, 76*
8.1	Using Basic Integration Formulas	1, 2, 3, 4, 5, 6, 7, 9, 10, 12, 15, 21, 27, 29, 32, 33, 45, 51
8.2	Integration by Parts	5, 8, 9, 13, 17, 21, 25 – 33, odd, 39, 41, 47, 51, 57, 64a, 67, 69
8.3	Trigonometric Integrals	7, 11, 13, 15, 17, 19, 35, 37, 41
8.4	Trigonometric Substitution	1, 5, 9, 11, 17, 19, 23, 31, 35, 39, 43, 51, 53, 57, 58
8.5	Integration of Rational Functions by Partial Fractions	11, 15, 16, 19, 25, 27, 28, 31, 33, 35, 39, 41
8.7	Numerical Integration (omit error estimates)	23, 24, 25
8.8	Improper Integrals	1, 2, 3, 5, 6, 17, 19, 20, 21, 27, 51, 53, 54, 55, 57, 59, 65
10.1	Sequences	1, 3, 4, 6, 9, 11, 16, 17, 19, 23, 35, 37, 40, 42, 45, 47, 49, 51, 53, 63, 67, 92, 97, 107, 121, 123, 137*
10.2	Infinite Series (omit Ex. 5)	1, 5, 7, 8, 9, 13, 17, 19, 22, 23, 27, 31, 33, 35, 45, 53, 57, 65, 79, 81, 84, 89, 97, 100*, 103*
10.3	The Integral Test (omit error estimates)	3, 6, 7, 11, 15, 17, 18, 23, 27, 37, 51, 52, 61, 64*
10.4	Comparison Test	1, 2, 3, 4, 5, 6, 9, 10, 13, 15, 17, 19, 20, 21, 22, 25, 26, 35, 47, 55, 58, 59*, 60*, 62*
10.5	Absolute Convergence: The Ratio and Root Tests	1, 3, 4, 5, 6, 9, 11, 13, 15, 27, 29, 35, 36, 42, 43, 67, 70*
10.6	Alternating Series and Conditional Convergence	1, 3, 4, 6, 7, 11, 15, 18, 19, 22, 23, 24, 25, 27, 31, 32, 34, 35, 39, 49, 51, 63, 67
10.7	Power Series (omit multiplication of series)	5, 9, 11, 12, 15, 21, 29, 31, 32, 37, 41, 53
10.8	Taylor and Maclaurin Series	1, 2, 3, 4, 5, 7, 11, 13, 15, 19, 21, 22, 23, 25, 29, 30, 31, 35, 37, 40, 41*
10.9	Convergence of Taylor Series (omit Theorem 24)	1, 3, 5, 7, 8, 10, 11, 13, 15, 21, 22, 25, 47*, 50*
10.10	The Binomial Series and Applications of Taylor Series (cover Evaluating Non-elementary integrals only)	23, 25, 27, 61
11.1	Parametrizations of Plane Curves	2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 16, 17, 19, 20, 21, 22, 23, 24, 25, 29, 31, 33, 37, 38, 43
11.3	Polar Coordinates	1, 3, 5, 11, 27, 47, 53, 55
12.1	Three-Dimensional Coordinate Systems	1, 3, 6, 7, 11, 13, 14, 17, 20, 21, 26, 27, 31, 32, 33, 35, 37, 39, 41, 43, 44, 55, 59, 63, 65, 71
12.2	Vectors (omit applications)	3, 5, 9, 11, 13, 14, 15, 17, 19, 21, 25, 27, 29, 31, 33, 35, 41
12.3	The Dot Product (omit work)	1, 2, 3, 5, 7, 8, 19, 20, 25, 29
12.4	The Cross Product (omit torque)	1, 3, 4, 7, 11, 12, 15, 17, 18, 19, 21, 27, 29, 30, 31
12.5	Lines and Planes in Space	3, 7, 9, 17, 19, 22, 23, 25, 27, 29, 31, 35, 41, 45, 47, 51, 57, 59, 61, 67, 69, 71, 72, 75
12.6	Cylinders and Quadric Surfaces	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 17 – 31, odd, 41
14.1	Functions of Several Variables	1, 2, 3, 5, 6, 8, 9, 11, 14, 15, 16, 18, 19, 23, 49, 51, 57, 61, 64
14.2	Limits and Continuity in Higher Dimensions (omit computing epsilon-delta, only cover ϵ - δ definition)	5, 9, 11, 13, 19, 21, 29, 31, 33, 35, 39, 42, 43, 45, 47, 49, 65, 68, 72*
14.3	Partial Derivatives	4, 5, 7, 8, 9, 11, 14, 16, 19, 25, 26, 27, 35, 36, 43, 46, 47, 57