

Calculus 1 B : Course Schedule

Module	block 1B , year 2019 - 2020
Book	Thomas' Calculus, Early Transcendentals, 12 th edition
Version	V01: 6 November 2019

wk	sect.	subject	exercises		additional training
			self study	tutorial	

Integration

1	4.8	Antiderivatives	5, 13 , 53	23bc, 41	8, 39, 76
	5.1	Area	9		21
	5.2	Summations	2, 15	17, 31, 40	8, 33, 41
	5.3	Definite integral	21	9, 11 , 17	22, 57
	5.4	Fundamental theorem of calculus	37	35, 39, 47, 48, 75	61, 79

Integration Techniques

2	5.5	Substitution in indefinite integrals	3, 31, 37	21, 55, 56	59, 70
	5.6	Substitution in definite integrals	5, 33	27, 29, 39	31, 49, 55
	8.1	Integration by parts	37, 43, 59	17, 25, 35, 45	33, 46
	8.7	Improper integrals	1, 17	13, 25	21, 31

Series

3	10.7	Power series	3a, 6a, 46	5a, 43, 45, 48, 52ab	11a, 41, 44
	10.8	Taylor and McLaurin series	3, 10, 15	11, 13, 23, 34	12, 32, 42

First order differential equations

4	7.2	Exponential change	1, 7	5, 25	6, 27, 29
	9.1	Solutions and slope fields	1, 2, 3, 4		5, 6
	9.2	First-order linear equations	1, 5, 7, 15	16, 17, 21, 27, 28	9, 19

Complex numbers

5	App. 7	Complex numbers	1, 2, 3, 5, 7, 11, 12, 13, 15, 18	6, 9, 10, 16, 21, 24, 26 28, 29, 30 (for e, use c and d)	8, 14, 17 19, 20, 23 27
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Second order differential equations

6	17.1	Second-order linear equations	2, 5, 15, 27	31, 57, 60, 65	6, 13, 17, 59
	17.2	Nonhomogeneous linear equations	2, 4, 8	29, 52, 53	9, 31, 57