

Modern Algebra (MACT 4134)

Assignments

Textbook: *Contemporary Abstract Algebra*, Ninth Edition, 2017, by Joseph A. Gallian.

Assignment	Topic	Required Problems
Chapter 0	Preliminaries	2(d), 4, 7, 10, 11 , 13, 20, 28, 33, 35, 57, 58, 59, 63.
Chapter 1	Dihedral Groups	2, 3, 5, 11, 13, 21.
Chapter 2	Groups	1(b,d), 2(a,b,e), 3(c,d), 5(a,b), 7, 14, 16, 18, 33, 34, 47.
Chapter 3	Subgroups	2, 4, 6(b), 7, 10, 19, 30, 34.
Chapter 4	Cyclic Groups	1, 5, 10, 11, 27, 30, 36, 48, 59, 61.
Chapter 5	Permutation Groups	1, 3(b), 6(a), 8(c,d), 10, 17, 23, 25, 43.
Chapter 6	Group Isomorphisms	1, 2, 4, 8, 11, 12, 14, 21, 22, 24, 34.
Chapter 7	Lagrange's Theorem	1, 7, 9, 10, 17, 19, 22, 38, 39.
Chapter 9	Normal Subgroups	1, 2, 6, 8, 9, 10(a), 12, 14, 22, 37.
Chapter 8	Direct Products	4, 5, 6, 15, 17, 21, 23, 35, 46, 48.
Chapter 10	Group Homomorphisms	8, 12, 15, 16, 20, 24.
Chapter 11	Finite Abelian Groups	2, 5, 10, 22, 31.
Chapter 12	Rings	2, 3, 5, 6, 12, 39, 40, 46.
Chapter 13	Integral Domains	3, 4, 9, 18, 32, 57(a,b).
Chapter 14	Ideals	1, 3, 4, 5, 11(a, b), 15, 32, 37.
Chapter 15	Ring Homomorphisms	1, 6, 8, 10(a), 17, 21, 34.
Chapter 16	Polynomial Rings	1, 3, 15, 20, 26.

Best wishes!
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