

Recommended Script Exercises

Discrete Algebraic Structures

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Chapter 1: Foundations of Mathematics

Double Inclusion: 2, 3, 6

Functions: 8, 9, 10, 11, 16

Chapter 2: Mathematical Logic

5, 6, 7, 9, 10, 11, 12

Chapter 3: Relations

General Relations: 2, 3, (4), 5, 6, 11, 12

Equivalence Relations: 17, 19

Orders: 20, 21, 22

Chapter 4: Cardinals and Counting

Combinatorial Proofs: 6, 7, 8, (13)

Counting: 9, 10, (11)

Landau Notation: 17, 18

Cardinalis: 20, 21, 22, **23**

Chapter 5: Elementary Number Theory

1, 2, 3, 5, 8, 9, (12)

(have a look at 12, last year arithmetic functions had a surprisingly big role in the exam)

Chapter 6: Algebraic Structures

General Operations: 1, 2, 7

Monoids & Groups: 3, 4, 5, 6, 9, 12, 13, 16, 17

Rings: 23, 24

Fields: 26, 27, 28

Polynomials: 34