Contents

Preface

1. Sets		
1	Sets and elements	
2	How to denote sets	

1	Sets and elements
2	How to denote sets
3	Logical notation
4	Inclusion, subset
5	Intersection
6	The one-element set and the empty set
7	Union
8	Difference

2. Products and Mappings

Exercises

1	Ordered pairs and triplets	13
2	Product	14
3	Mapping (function)	15
4	Surjection, injection and bijection	18
5	Inverse mapping	20
6	Composite mapping	22

Exercises 3. Cardinal Numbers

· Cardinal Numbers		
ı	The postulate of cardinal numbers	25
	The cardinal numbers \aleph_0 and c	27

3	Inequality	32
4	Addition	35
5	Infinite sets	39
6	The Cantor-Bernstein-Schröder theorem	42
•	Exercises	46
. C	ardinal Algebra	
1	Product	48
2	Exponentiation	52
3	The set of all subsets of A	56
4	Sequences	59
•	Exercises	61
About Wrong Definitions		63
Hints and Answers		65

Index