

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
I. THE ALGEBRA OF FUNCTIONS OF ONE VARIABLE	4
1. The Classical Foundation of the Theory of Functions	4
2. Algebra of Functions (Tri-Operational Algebra)	6
3. The Theory of Constant Functions	10
4. The Lytic Operations	15
5. Exponential Functions	18
6. The Logarithmic Functions	20
7. The Absolute and the Signum	22
8. The Power Functions	25
9. The Trigonometric Functions	28
II. THE ALGEBRA OF CALCULUS	30
1. The Algebra of Derivatives	30
2. The Derivation of Exponential Functions	33
3. The Derivation of Logarithmic Functions	35
4. Logarithmic and Exponential Derivation	35
5. The Derivation of the Trigonometric Functions	37
6. The Foundation of the Algebra of Antiderivatives	39
7. Formulae of the Algebra of Derivation in the Notation of Antiderivation	41
8. The Three Methods of Antiderivation	42
III. ON FUNCTIONS OF HIGHER RANK	45
1. The Algebra of Functions of Higher Rank	45
2. Sum and Product	49
3. The Algebra of Partial Derivatives	50