

Contents

<i>Chapter 1. Introduction</i>	1
1. Basic Concepts	1
2. Some Key Theorems	5
<i>Chapter 2. Positive Series</i>	9
3. Preliminaries	9
4. Comparison Tests	12
5. The Tests of Cauchy, D'Alembert and Raabe	23
6. The Tests of Kummer, Bertrand and Gauss	33
7. The Integral Test	41
8. Further Results	48
<i>Chapter 3. Arbitrary Series</i>	61
9. The Cauchy Convergence Criterion	61
10. Absolute and Conditional Convergence	63
11. Power Series	68
12. Alternating Series. Leibniz's Test	73
13. The Tests of Abel and Dirichlet	77
<i>Chapter 4. Infinite Products</i>	89
14. Concepts and Notation	89
15. Basic Theorems	94
<i>Chapter 5. Series and Product Expansions of Elementary Functions</i>	106
16. Taylor Series	106
17. Examples	112
18. The Binomial Series	119
19. Stirling's Formula	124
20. Infinite Product Expansion of the Sine	127
<i>Index</i>	135