

C O N T E N T S

Chapter 1.	Three basic principles	1
Chapter 2.	The large sieve	11
Chapter 3.	Arithmetic formulation of the large sieve	23
Chapter 4.	A weighted sieve and its application	31
Chapter 5.	A lower bound of Roth	45
Chapter 6.	Classical mean value theorems	50
Chapter 7.	New mean value theorems	58
Chapter 8.	Large moduli theorems	64
Chapter 9.	Further results and conjectures concerning mean and large moduli	69
Chapter 10.	Mean moduli of L-functions	74
Chapter 11.	Zero-free regions and the proliferation of zeros	85
Chapter 12.	Distribution of zeros of L-functions	95
Chapter 13.	Least character non-residues and $\arg L(\frac{1}{2}+it, \chi)$	117
Chapter 14.	The prime number theorems of Hoheisel and Selberg	130
Chapter 15.	The Bombieri-Vinogradov theorem and other applications of the large sieve	133
Chapter 16.	A lemma in additive prime number theory	141
Chapter 17.	The mean value theorem of Barban	145
Appendix I		155
Appendix II		157
Bibliography		162