CONTENTS

1 THE LANGUAGES L 1

1. The vocabulary of the languages L 2
2. The grammar of the languages L 4
3. Designation, extension, and truth in the languages L 9
4. Logical truth, implication, and equivalence in the languages L 15
5. Set theory and the language L 21

Notes 29

2 STATISTICAL PROBABILITIES: PART ONE 33

6. Statistical probabilities allotted to sets 34
7. Comments and illustrations 38
8. Absolute probabilities, probability sets, and weights 47
9. Random functions 51
10. Random sampling and attendant distributions 53
11. Statistical probabilities estimated by means of sample soundings 57

Notes 61

3 STATISTICAL PROBABILITIES: PART TWO 67

12. Sets, sentences, and statistical probabilities 68
13. Statistical probabilities allotted to the sentences of the languages L 71
14. Statistical probabilities as truth-values 76
15. The relative frequency allotment 78
16. The statistical probability of closed sentences 85
17. A first look at inductive inferences 89

Notes 93

4 INDUCTIVE PROBABILITIES 97

18. Inductive probabilities allotted to the sentences of the languages L 98
19. Variants of the standard allotments (I) 104
20. Variants of the standard allotments (II) 107
21. Inductive probabilities as estimates of truth-values 112
22. Logical falsehoods and logical truths qua evidence sentences 122
23. Personal versus inductive probabilities 126
24. A second look at inductive inferences 129

Notes 134

LIST OF SYMBOLS 140

BIBLIOGRAPHICAL REFERENCES 141

INDEX OF AUTHORS 145

INDEX OF MATTERS 146