

1. Record Nr.	UNINA9910812920903321
Autore	Quine W. V (Willard Van Orman)
Titolo	Mathematical logic / / by Willard Van Orman Quine
Pubbl/distr/stampa	Cambridge, MA, : Harvard University Press, c1981
ISBN	0-674-04246-8
Edizione	[Rev. ed.]
Descrizione fisica	1 online resource (xii, 346 pages)
Soggetti	Logic, Symbolic and mathematical Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliography and index.
Nota di contenuto	Frontmatter -- PREFACE, 1981 -- PREFACE TO THE REVISED EDITION -- PREFACE -- CONTENTS -- Introduction -- CHAPTER ONE. Statelfzents -- 1. Conjunction, Alternation, and Denial -- 2. The Conditional -- 3. Iterated Composition -- 4. Use versus Mention -- 5. Statements about Statements -- 6. Quasi-Quotation -- 7. Parentheses and Dots -- 8. Reduction to Three Primitives -- 9. Reduction to One Primitive -- 10. Tautology -- 11. Selected Tautologous Forms -- CHAPTER TWO. Quantification -- 12. The Quantifier -- 13. Formulae -- 14. Bondage, Freedom, Closure -- 15. Axioms of Quantification -- 16. Theorems -- 17. Metatheorems -- 18. Substitutivity of the Biconditional -- 19. Existential Quantification -- 20. Distribution of Quantifiers -- 21. Alphabetic Variance -- CHAPTER THREE. Terms -- 22. Class and Member -- 23. Logical Formulae -- 24. Abstraction -- 25. Identity -- 26. Abstraction Resumed -- 27. Descriptions and Names -- CHAPTER FOUR. Extended Theory of Classes -- 28. Stratification -- 29. Further Axioms of Membership -- 30. Substitutivity of Identity -- 31. Substitution for Variables -- 32. Further Consequences -- 33. Logical Product, Sum, Complement -- 34. Inclusion -- 35. Unit Classes -- CHAPTER FIVE. Relations -- 36. Pairs and Relations -- 37. Abstraction of Relations -- 38. Converse, Image, Relative Product -- 39. The Ancestral -- 40. Functions -- 41. Abstraction of Functions -- 42. Identity and Membership as Relations -- CHAPTER SIX. Number -- 43. Zero, One, Successor -- 44. Natural Numbers -- 45. Counter Sets -- 46. Finite and Infinite -- 47. Powers of Relations -- 48. Arithmetical

Sum, Product, Power -- 49. Familiar Identities of Arithmetic -- 50.
Ratios -- 51. Real Numbers -- 52. Further Extensions -- CHAPTER
SEVEN. Syntax -- 53. Formality -- 54. The Syntactical Primitive -- 55.
Protosyntax -- 56. Formula and Matrix Defined -- 57. Axioms of
Quantification Defined -- 58. Theorem Defined -- 59. Protosyntax
Self-Applied -- 60. Incompleteness -- APPENDIX. Theorem versus
Metatheorem -- List of Definitions -- List of Theorems and
Metatheorems -- Bibliographical References -- Index of Proper Names
-- Index of Subjects
