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Descrizione fisica	1 online resource (493 pages)
Collana	Palgrave Philosophy Today, , 2947-9347
Disciplina	160
Soggetti	Logic Formal Logic Philosophical Logic
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. What Logic Studies -- 2. Concepts of Deductive Reasoning -- 3. Formal Logic of Sentences, Sentential Logic (also called Sentential Logic and Statement Logic) -- 4. Sentential Logic Languages -- 5. Formal Predicate Logic (also called First-Order Logic) -- 6. Translations from English into = (also called Symbolizations, Formalizations) -- 7. Semantic Models for : -- 8. Proof-Theoretical System for Predicate Logic: = -- 9. Definite Descriptions: = -- 10. Basics of Set Theory.
Sommario/riassunto	This book provides a comprehensive introduction to the essential elements of standard (classical) symbolic logic. Key topics covered include: · The characteristic nature and scope of logic as a discipline · The construction of a series of distinctly named formal languages suitable for formal translation · Semantic models · The construction of decision procedures · The execution of proof-theoretic arrangements like natural deduction and proof-sequent systems The book covers both the semantics and proof theory of the standard sentential (propositional) logic and predicate (first-order) logic. Other topics covered include: parsing trees, extraction of alternative notations (for instance, Polish notation), Fitch-style proof-theory, sequent and 'tree' proof systems, comparisons and contrasts with intuitionistic logic, and

presentations of predicate logic models. An ancillary chapter on elements of set theory is conveniently placed at the end and includes insights into the Zermelo-Fraenkel systematization of set theory. The philosophy of logic is also explored. Exercises in the text provide instruction on mathematical induction for the construction of formula, tests for the well-formedness of Polish notation, and functional completeness. Symbolic Logic is essential reading for all philosophy students taking intermediate level formal logic courses and will also appeal to diligent first year students of logic. The text is replete with exercises on both the formal machinery and the philosophical aspects of logic.