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★**Fathoming formal logic. Vol. II.**

Semantics and proof theory for predicate logic.

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Publisher's description: "This text, volume II of a two-volume work, examines in depth the so-called 'standard' predicate logic. Including a foundational lexicon of terms and a detour through the classical propositional logic, this volume can be used independently of the first [O. Makridis, *Fathoming formal logic. Vol. I*, Stud. Log. (Lond.), 71, Coll. Publ., [London], 2018; MR3821567].

"As a means toward teasing out theoretical subtleties and negotiating formal and philosophic challenges, this work uses detailed examples and exercises; because of this feature, the text can also be used for a rigorous regimen of study.

"Laying foundations in the study of Predicate Logic is key to a technical understanding of deductive reasoning and to honing rigorous critical thinking and problem-solving skills.

"Notable (some of them unusual) features that are covered in the present volume include: modeling the semantics of predicate logic in detail with forays into issues of philosophic importance; prenex forms; analytic presentation of the proof-theoretic natural-deduction method with detailed justifications of the required restrictions on the rules; translation tasks are examined thoroughly, with inclusion of translations of compact predicates, disambiguation, idiomatic translations, non-classically quantified phrases, numerical statements, definite descriptions and regimentation; both negative and positive trees are included as decision procedures; appendices are offered on Set Theory, Mathematical Induction, and Dialogical Logic."