How to Use This Book

Mathematical prerequisites for this text include elementary set theory and an intuitive understanding of the concept "computable function." Lewis and Papadimitriou (1981) provide an excellent introduction to this material. Acquaintance with the elementary portion of recursion theory is also advisable. We recommend Machtey and Young (1978).

Starred material in the text is of more advanced character and may be omitted without loss of continuity. We have relegated considerable exposition to the exercises, which should be at least attempted.

Definitions, examples, lemmas, propositions, open questions, and exercises are numbered independently within the section or subsection in which they appear. Thus proposition 4.4.1B refers to the second proposition of section 4.4.1; it appears before lemma 4.4.1A, the first lemma of the same section. Symbol, subject, and name indexes may be found at the end of the book.

We use standard set-theoretic notation and recursion-theoretic notation drawn from Rogers (1967) throughout. Note that ⊂ denotes proper inclusion, whereas ⊆ denotes (possibly improper) inclusion.