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<<测度与范畴学>>

图书基本信息

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前言

This book has two main themes：the Baire category theorem as a method for proving existence。
and the “ duality ” between me.~SUl'e and category. The category method iS illustrated by a variety of typical applications， and the analogy between measure and category iS explored in all of its ramifications.To this end,the elements of metric topology are reviewed and the principal properties of Lcbesgue measure are derived.It turns out that Lebesgue integration is not essential for present purposes-ltheRiemann integral is SUfIident.Concepts of general measure theory andtopology are introduced， but not iust for the sake of generality.Needlesstosay,theterm “ category ” refersalwaystoBairecategory；ithasnothingtodOwiththetermasitiSusedin homologicalalgebra.A knowiedge of calculus is presupposed,and some familiarity with the algebra of sets.The questions discussed are ones that lend themselves naturally to set-theoretical formulation.The book is intended as an introduction to this kind of analysis.It could be used to supplement a standard cOUrse in real analysis,as the basis for a seminar,or for inde. pendent study.It is primarily expository。
but a few refinements of known results are included,notably Theorem 15.6 and Proposition 204.The references are not intended to be complete.Frequently a secondary source is cited where additional references may be found.The book iS a revised and expanded version of notes originaily prepared for a course of lectures givfn at Haverford College during the spring of 1957 under the auspiccs of the William Pyle Philips Fund. These， in turn， were based on the Earle Raymond Hedrick Lectures presented at the Summer Meeting of the Mathematical Association of America at Seattle,Washington。
in August.1956.

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内容概要

This book has two main themes： the Baire category theorem as a method for proving existence, and the "duality" between measure and category. The category method is illustrated by a variety of typical applications, and the analogy between measure and category is explored in all of its ramifications. To this end, the elements of metric topology are reviewed and the principal properties of Lebesgue measure are derived. It turns out that Lebesgue integration is not essential for present purposes——the Riemann integral is sufficient. Concepts of general measure theory and topology are introduced, but not just for the sake of generality. Needless to say, the term "category" refers always to Baire category; it has nothing to do with the term as it is used in homological algebra

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书籍目录

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