

theorem and the Stone-Čech compactification. There is a table (stretching over six pages) that summarizes the main results. Chapter V, *Convex sets and weak topologies*. The main topics are: separation theorems for convex sets, the Tychonoff-Alaoglu theorem, Eberlein's theorem on sequential compactness, the Krein-Milman theorem, and the Schauder fixed point theorem. For locally convex spaces, only what might be called the "classical" theory is given—pre-Bourbaki and pre-Grothendieck.

Chapter VI, *Operators and their adjoints*. Main topics: completely continuous operators, and the Riesz-Thorin convexity theorem. There is a tabular presentation of the principal representation theorems for operators from and to the standard spaces. Chapter VII, *General spectral theory*. The discussion begins with finite-dimensional spaces, includes the Riesz theory of completely continuous operators, and includes also an introduction to perturbation theory. Chapter VIII, *Applications*. The applications concern semigroups (the Hille-Yosida theorem), and ergodic theory (mean and individual).

The terminology and the notation are almost always standard and easy to assimilate. The exposition is never watery. Things proceed at a good clip; the definitions and the proofs are concise and neatly formulated. A tremendous enterprise such as the authors have undertaken is more likely to fail than to succeed, and existence itself is more than half the proof of success. The authors deserve thanks for their labors and congratulations on their achievement.

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*Introduction to logic*. By Patrick Suppes. Princeton and New York, Van Nostrand, 1957. 18+312 pp. \$5.50.

One can distinguish at least three attitudes towards the increasingly important role of logic in the undergraduate mathematics curriculum; the *reactionary* attitude which denies it any place; the *moderate* attitude which regards it as a "luxury" subject, to be made available to those advanced students who are especially interested; and the *progressive* attitude which regards it as one of the earliest and most basic skills which a major should learn.

Rosenbloom's *Elements* is excellent for the purposes of the moderates; but until the appearance of Suppes' book the progressives had the alternatives of teaching from notes or bowdlerizing one of the existing texts. The better of those texts shared the feature that they became embroiled in logical questions for their own sake rather than as a tool of mathematics; some of them (notably Fitch's and Rosser's) fell on this account awkwardly between being an undergraduate text