particular book) it is simply a mistake to try to teach this material to students without some background in abstract mathematics. They can not appreciate what is going on. For students *with* such a background, this could be a useful book, but it should be supplemented with many, many more examples and applications. Of course this is exactly the kind of thing a teacher can and should do.

4. The Ponasse book. This book concentrates almost exclusively on the Completeness Theorem and its relation with Boolean algebra and general topology. The Compactness and Löwenheim-Skolem Theorems are there, but never discussed or used. There are almost no examples or applications, and the Incompleteness Theorems are not mentioned. What the book *does* cover could be useful to a student of logic, but it would be an unfortunate way to introduce mathematics students to the basic concerns of mathematical logic.

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Introduction to spectral theory: Selfadjoint ordinary differential operators, by B. M. Levitan and I. S. Sargsjan, Translations of Mathematical Monographs, vol. 39, Amer. Math. Soc., Providence, Rhode Island, 1975, xi + 525 pp. $52.80.

This book gives a systematic account of a number of basic topics in the modern spectral theory of selfadjoint ordinary differential operators, particularly second order and a system of two first order operators. It also contains, in substantially less detail, the spectral theory concerning nth order operators and is simply meant to serve as an introduction to their area of study.

A differential operator is said to be regular if the domain of its variables is finite and its coefficients are continuous. If the domain is infinite and/or all or some of the coefficients are not summable, then the differential operator is called singular. The basic spectral theory of regular second order differential operators consists of the Sturm-Liouville theory and much space is devoted in this book to regular problems. Nonetheless, the principal content of the book is the spectral theory of singular operators. This theory was founded by H. Weyl whose work, together with the classical moment problem, played an important role in the development of a general spectral theory of symmetric and selfadjoint operators, through the efforts of F. Riesz, J. Von Neumann and others. H. Weyl's remarkable result on the limit circle and limit point gives a complete description for symmetric second order differential operators and of all its selfadjoint extensions. The general problem of describing all selfadjoint extensions of a symmetric operator was solved later by J. Von Neumann. A large role in popularizing the spectral theory of differential operators was played by the monographs of E. C. Titchmarsh, in which a new approach to the theory of singular second order operators was given. Much space is allotted in this book to singular systems of two first order operators also.

Although it appeared at the beginning that the abstract spectral theory