In sharp contrast to Edwards' verbose style, Ribenboim's presentation is clear, concise and elegant. The thirteen lectures cover the major events of all three eras with a heavy emphasis on the post-Kummer era. The book is a true work of art. The lectures are well organized and present the mathematics underlying seemingly isolated results in a very cohesive manner. In order to avoid too much technical detail, the proofs of the more difficult theorems are sometimes only sketched and other times omitted completely. An extensive bibliography is given at the end of each section so the reader can easily locate sources which cover material missing in the text. Ribenboim also promises a second volume which is intended to contain much of the technical development which was omitted in these thirteen lectures. His first book should stimulate interest in and promote a better understanding of the mathematics related to Fermat's last theorem. One can only have high expectations for Ribenboim's second book on this subject.

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Classification theory and the number of non-isomorphic models, by Saharon Shelah, Studies in Logic and the Foundations of Mathematics, Volume 92, North-Holland Publishing Company, Amsterdam-New York, 1978, xvi + 544 pp., $62.25.

Can the dimension theory of vector spaces, algebraically closed fields, countable torsion Abelian groups (Ulm's Theorem) etc. be generalized to provide a means of characterizing the models of an arbitrary first order theory? If not, can the obstacle to such an extension be identified and the program carried through in its absence? A vector space or an algebraically closed field is determined by a single cardinal (the number of independent elements); a countable torsion Abelian group is determined by an infinite sequence of cardinals. Thus by a generalized dimension theory we mean a method of attaching to each model a sequence of cardinals which determine it up to isomorphism. The first test of such a generalized dimension theory is its ability to solve the spectrum problem: i.e., to count the number of models of a theory. In fact, Shelah's answer to these questions arose from the study of the following problem. For a first order theory T, let $n(T, \lambda)$ denote the number of non-isomorphic models of T with cardinality λ. Determine the