

on separable ones. Roy's example removes all doubt. The reader will find it rewarding to work it carefully through.

There are also examples of the pathological behavior of dimension on bicomcompacta. An example due to V. V. Filippov is presented as well as ones due to Lokucievskii and Vopenka. Filippov constructed a bicompactum X which has $\dim X = 1$, $\text{ind } X = 2$, and $\text{Ind } X = 3$. This example and its modifications show that except for the inequalities $\dim X \leq \text{ind } X \leq \text{Ind } X$, \dim , ind , and Ind are independent variables on bicompacta.

One will find a section on local dimension containing Dowker's classic Example M of a completely regular space of covering dimension 1 and local dimension 0. There are sections detailing the results on dimension raising and lowering mappings, on the dimension of product spaces, on analytic dimension of algebras of continuous real-valued functions (reminiscent of Chapter 16 of Gillman and Jerison's *Rings of continuous functions*), and on dimension and bicompactification of completely regular spaces. There are extensive historical notes at the end of each chapter which help the reader put individual results in perspective. In these one is also introduced to still other advances and open problems.

The book does not treat homological dimension theory except in the historical notes. A separate volume would be necessary to handle this area with the same thoroughness. Rumor has it that such a volume is forthcoming from the Russian school. This would be a welcome addition. The theory for separable metric spaces is not treated with the thoroughness of Hurewicz and Wallman although there are some recent results appearing in the notes that bring one up to date. For those whose interest is separable metric spaces Hurewicz and Wallman remains the recommended text. One might criticize omission of some detail in this or that section of the book. Be reasonable! How long do you want the book to be? The historical notes and references will lead the reader to most additional results.

We have in Pears an excellent reference. The broad spectrum of recent advances is painted with a fine brush. Important (and complicated) examples are thoroughly examined. In a book of this level the statement of many theorems is necessarily technical. The novice may not appreciate the years of agonizing effort made by dimension theorists to weaken each hypothesis and make each theorem the paragon of precision. However, researchers who need the exact results of dimension theory for general spaces will find them here.

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Elementary calculus, by H. Jerome Keisler, Prindle, Weber and Schmidt, Boston, 1976, xviii + 880 + 61 (appendix) pp.

Our educational system contains many interesting paradoxes. We tell the students to get involved in the world, and the curriculum becomes increasingly abstract. Courses in sociology, anthropology, economics, et cetera are intro-