

discussed earlier. Then there are various standard applications of these theorems to Cousin problems and divisors on a complex space. A final section discusses locally free sheaves and holomorphic vector bundles, and proves a tubular neighbourhood theory for complex submanifolds of  $C^n$ .

The last chapter deals with the important geometric concept of pseudoconvexity. Grauert's solution to the Levi problem for strongly pseudoconvex subdomains of a complex manifold is presented here along with a complete discussion of the relation between pseudoconvexity, holomorphic convexity and domains of holomorphy for domains spread over  $C^n$ .

This book is an important reference tool for people working in the general area of several complex variables. The beginner will no doubt experience difficulty in trying to master this book, as it demands a fair amount of mathematical maturity and background at times. This is due in part to the mixture of analysis, algebra, geometry, and topology which go into the subject, and the book draws freely on fundamental results in these various fields. In addition to this some proofs don't seem as clear as they could be. There are also mistakes in cross referencing and one section in particular, Lemma 20 through the end of Section B in Chapter III, uses definitions and notations introduced much later in the book. Some theorems are incorrect as stated and the reader must read carefully at times to be sure he understands just what is true. However, the authors have assimilated a lot of mathematics here in one book, and it's clear that it was not an easy task. A second edition of this book with some careful revision and editing in certain places would enhance the quality of this book, and increase its usefulness. Nevertheless, the reviewer is very happy that such a book was written, and it does do justice to a survey of an exciting area of mathematical development.

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Introduction to Cybernetics, by V. M. Glushkov. Academic Press, 1966. Originally published as "Vvedeniye v Kibernetiku" Ukr. Acad. of Sci. Kiev, 1964. 322 pages. \$11.75.

This book is a unified treatment, at a beginning graduate level, of several topics related to cybernetics. The theories of algorithms and Boolean functions are developed and applied to the theory and construction of automata, self organizing systems, and perceptrons. The use of Algol to program these for a digital computer is presented. The book closes with a presentation of examples of what has been accomplished with "machine proof of theorems" and an introduction to some of the problems remaining.

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