Calculus of Residues, by D.S. Mitrinovic (Tutorial Text No.4) in cooperation with J.H. Michael. Noordhoff, Groningen, 1966. 87 pages. $1.90. (Cloth-bound $3.90).

This is a section of the English edition of a collection of mathematical exercise problems which has first been published in Serbian (1960-1962) by Mitrinovic in collaboration with several Yugoslavian mathematicians. It should prove to be a valuable complement to every undergraduate text on complex function theory. After a brief Introduction follow four chapters, each containing worked examples and exercises, mostly with answers, designed for drill in complex integration applying the residue theorem. It might be pointed out, however, that these examples do not include all aspects of the theory of residues as could be expected from the title of the work, nor is there every type of integral represented that can be evaluated by the residue method. Some of the examples appear rather trivial with respect to others discussed previously and thus could have been replaced by new material. - Contents: Chap.1, Direct application of the residue theorem (p.11-21). Chap.2, Integration along the real axis (p.22-68). Chap.3, Rational functions of $\cos\theta$ and $\sin\theta$ (p.69-79). Chap. 4, Summation of series (p.80-87).

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A First Course in Integration, by Edgar Asplund and Lutz Bungart. Holt, Rinehart and Winston, New York. xiii + 489 pages. 1966, $11.55.

The book under review is designed for a one-semester undergraduate course in senior years. The idea of the scope of the book is best obtained from the following ten chapters. I. Step functions and Null sets. II. The Lebesgue integral. III. Measurability. IV. Integration of functions of several variables. V. L^2 and L^p spaces. VI. The differentiation of functions of locally bounded variation. VII. Absolutely continuous functions. VIII. Stieltjes integrals. IX. The Radon-Nikodym theorem. X. Applications to the theory of Fourier series.

The following are the main features of the book.

(i) Each chapter starts with a short introduction together with the comments on its dependence on other chapters of the book, and contains a large number of exercises at the end. A summary of main results completes each chapter.

(ii) The material under 'Bibliographical Comments and Remarks' should be particularly useful for the mature student.

(iii) Indexes for theorems referred to by name, symbols and subject index are also given.

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