

it would be quite easy to use various topics treated in the book in a course, whose main interest is not integral operators. One might mention, the Riemann-Stieltjes integral, functions of bounded variation, methods of summation of series, positive definite series, the moment problems, Bernstein's theorem, the Tauberian theorems, the prime number theorem, the Laguerre polynomials, the notion of a positive definite kernel of an integral equation, and the specific integral equations mentioned.

Thus the author has presented us with a treatise on a branch of analysis of great importance and whose applications are of wide interest. The book is extremely satisfactory, when concerned with either its principal topics or the other related developments and one is confident that it will have a most valuable effect both on research and graduate study.

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Mathematical Methods in Engineering. By Theodore von Kármán and Maurice A. Biot. New York, McGraw-Hill, 1940. 12+505 pp. \$4.00.

This book by two masters of applied mathematics selects certain representative groups of advanced engineering problems and presents the appropriate mathematical methods of solution, together with helpful excursions into purely mathematical topics. This is a very effective plan that might well be followed by future books in applied mathematics. The problems are largely in mechanics and are interesting, instructive and up-to-date, especially those on the airplane—as might be expected from the interests and accomplishments of the senior author.

Besides the problems worked out in the text, each chapter includes a set of problems of graded difficulty to be worked out by the student, the answers being given at the end of the book. Each chapter opens with a thought-provoking quotation from an authority in the field and ends with a well selected list of references, mostly standard texts.

The authors are as careful with their mathematics as with their physics and engineering, but have chosen to omit mathematical proofs in many cases where they felt that space was not available. It seems to the reviewer that in some of these cases at least a brief outline of the proof could have been given to the advantage of the reader.

Chapter I is a direct, clear introduction to ordinary differential