$r = 1, s = 0(0.5)10(1)40(2)100; r = 2, s = 0(1)40(2)100;$

$r = 3, s = 0(1)20(2)68(4)100; r = 4, s = 0(1)14(2)40(4)100;$

$r = 5, s = 0(2)60(4)100; r = 6, s = 0(2)100; r = 7(1)9, s = 0(4)100;$

$r = 10, s = 0(5)100; r = 11(1)15, s = 0(10)100.$

Most values are given to 9 or 10 decimals, though for the smaller values of k a constant number (9 or 10) of significant figures is provided so as to allow the complete solution of (*) to be calculated to a high degree of accuracy. The remaining tables contain joining factors and auxiliary functions, a description of which is beyond the scope of this review.

In conclusion, the reviewer thinks that the computation of the several Mathieu functions themselves would be very welcome. At least for the periodic Mathieu functions proper, this would not be too difficult for table-makers using high-speed electronic computers!

C. J. BOUWKAMP

Die zweidimensionale Laplace-Transformation. Eine Einführung in ihre Anwendung zur Lösung von Randwertproblemen nebst Tabellen von Korrespondenzen. By D. Voelker and G. Doetsch. (Lehrbücher und Monographien aus dem Gebiete der Exakten Wissenschaften, Mathematische Reihe, vol. 12.) Basel, Birkhäuser, 1950. 259 pp. 43 Swiss fr.

The motivation of this book is described by the authors in the preface in the following words. "The classical one-dimensional Laplace transformation now belongs to the common heritage of mathematicians and technologists, and since the publication of the monograph *Theorie und Anwendung der Laplace-Transformation*, books have been written on it in almost all cultured languages. By contrast, the two-dimensional (or double) Laplace transformation has been used only occasionally, in some memoirs. There is no systematic presentation of its theory and applications, or an elucidation of its distinctive features. Such a presentation is offered in this book which consists largely of unpublished material." (Reviewer's translation.)

The emphatic reference to the senior author's well known treatise should not mislead the reader into expecting the same sort of book here. On the one hand, the present book is based on Lebesgue's integration theory while Riemann integrals were used in Doetsch's book; and on the other hand, in contradistinction to the basic character of the earlier work, the orientation of the book under review is towards the applications, especially partial differential equations. This more practical orientation is shown by leaving aside basic ques-