

Such an addition might lead up to an explanation of the Church λ -quantifier, in terms of which, in connection with constants, all other quantifiers can be defined.

HASKELL B. CURRY

Two-Dimensional Potential Problems Connected with Rectilinear Boundaries. By B. R. Seth. Allahabad, India, The Allahabad Law Journal Press, 1939. 118 pp.

This attractive little volume grew out of a course of lectures delivered by Dr. Seth at the University of Lucknow in 1939. It deals primarily with the application of the Schwarz-Christoffel transformation in the solution of several problems and potential theory and related fields of mathematical physics. Among the problems discussed are special cases of the problem of torsion of a long prism as well as the Saint-Venant flexure problem, and problems of ideal fluid flow around prisms.

The author restricts himself to rectilinear boundaries for which the Schwarz-Christoffel transformation allows mapping on a half-plane. By confining himself to rectangular regions, special triangular regions such as the equilateral triangle, the 90° , 60° , 30° triangles and other similar special regions, he is able to express the mapping and the solutions of the problems for them in terms of the classical elliptic functions. Among other regions considered is the "angle-iron," the region on the outside of a rectangle, and the L -section.

The book will be welcomed by workers in this field of mathematical physics, as well as by mathematicians who are interested in application of elliptic functions.

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Operational Methods in Applied Mathematics. By H. S. Carslaw and J. C. Jaeger. Oxford, Clarendon Press, 1941. 16+264 pp. \$5.00.

In May 1815 Simeon Denis Poisson read before the Paris Academy a memoir on the distribution of heat in solid bodies. Extracts from this memoir were at once published in the *Journal de Physique* and in the *Bulletin de la Société Philomathique*. The memoir was subsequently enlarged and became, perhaps, one of Poisson's favorites because in May 1821 the work was printed and distributed privately two years before its final publication in *Journal de l'École Polytechnique*, vol. 12, no. 19, pp. 1-162. Poisson here made, I think, the first use of the method of the inverse Laplace transformation. In an attempt to find the distribution of temperature in a uniform rod radiating at its ends he was led to two linear functional differential equa-