for partial differential equations of elliptic and hyperbolic type with constant coefficients, in various classes of functions and distributions. However, the book is of value to the general reader, since it contains good accounts of such topics of general interest as a theory of linear topological spaces, generalized functions, distributions, convolutions, and Fourier transformations of generalized functions and distributions. It also contains a good account of such important topics in the theory of partial differential equations as fundamental solutions of equations with constant coefficients and the differentiability of solutions of hyperelliptic equations. It contains a statement and proof of the Sobolev lemma, and it is the only book which contains a proof of the important Seidenberg-Tarski theorem. One typographical error was noted: in the statement of the theorem on page 218, change sigma to a on the third line from the bottom and 16 spaces from the left.

P. D. L.

50[L].—Solomon Lefschetz, *Differential Equations—Geometric Theory*, second edition, John Wiley & Sons, Inc., New York, 1963, x + 390 p., 23.5 cm. Price $10.00.

The second edition of Lefschetz's now classical book has a considerable amount of important new material. After the preliminary chapters containing standard information on existence theorems and linear systems, including Floquet theory and stability, the author proceeds to a detailed study of Liapunov stability. Considerable emphasis is put on the direct method. An important feature is the treatment of the converses of the Liapunov theorems in case the system is suitably stable at a critical point.

After a study of the n-dimensional case, where many of the results are still fragmentary, there is a detailed study of two-dimensional systems, including the critical cases and structural stability.

The remainder of the book is concerned with equations of the second order, including the Cartwright-Littlewood theory and the Hill-Mathieu equations.

The methods used are both analytic and topological. The reader untrained in geometry may have difficulty with the close geometric reasoning of the latter chapters. On the other hand, the material is not readily available in any other single source.

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51[P].—S. G. Lekhnitskii, *Theory of Elasticity of an Anisotropic Elastic Body*, Holden-Day, Inc., San Francisco, 1963, xii + 404 p., 26 cm. Price $10.95.

This monograph is a translation from Russian of a text written in 1950 by one of the leading pioneers in the theory of anisotropic elasticity. His earlier book *Anisotropic Plates*, written in 1947, is already classical. The present monograph represents the results of the author's investigations (and related works) on another class of important problems in anisotropic elasticity.

The author's stated purpose in writing this book was to bring together some scattered results on anisotropic problems which have appeared in the literature