reading. The mathematician not working in lattice theory can get from this book a good idea of the history and importance of distributive lattices and their role in logic and universal algebra. The book is also suitable as a text for graduate students and the numerous exercises scattered throughout should be quite helpful especially to the novice doing independent reading. In two areas the reviewer wishes things might have been different. The authors use + and · instead of $\vee$ and $\wedge$ throughout; one's preference here is somewhat a matter of "creature comfort" and it must be said that the authors are in good company with respect to their notation (see for example von Neumann's *Continuous geometry*). In a text such as this one, designed to bring the reader to the frontiers of current research, it would have been a natural thing to include in addition to the exercises some specific open problems. Although it is to be hoped that any such collection will soon become out of date, the inclusion of such problems does give a feeling for what the experts are asking and sometimes provides impetus and a challenge, especially for graduate students.

In summary, *Distributive lattices* is worth having. It was carefully planned and well written, providing a survey of the general area, special topics, and information on where to find more. It is a useful reference work for lattice theorists and a good source of information for those not conversant with the field, where perhaps it can kindle a spark of interest in the position and development of one of lattice theory's oldest branches.

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MARY KATHERINE BENNETT

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Pseudo-differential operators, by Michael Taylor, Lecture Notes in Mathematics, No. 416, Springer-Verlag, Berlin, Heidelberg, New York, 1974, iv+155 pp., $7.40.

The reverse of differentiation is integration; the reverse of a linear partial differential operator is, most likely, some kind of integral operator, such as the Newtonian potential. The classical operators of potential theory have been generalized in stages, first to singular integral operators, then to pseudo-differential operators, and on to Fourier integral operators. The heart of these theories is a "*functional calculus*". The singular integral operators, for instance, are mapped homomorphically onto a class of functions, called "symbols" of the operators: The composition of operators corresponds to the pointwise product of symbols, adjoints to complex conjugates, and sums to sums. The homomorphism has a kernel which, in the classical applications, consists of "negligible lower order terms". The