First Concepts of Topology. The Geometry of Mappings of Segments, Curves, Circles, and Disks, by W.G. Chinn and N.E. Steenrod. Random House, New Mathematical Library, Vol.18, 1966. viii + 160 pages. Paperback $1.95.

The author of a first-rate introduction to a discipline should be both an expert in the field as well as a very skillful teacher - two qualities not always combined in one person. The book under review solves the problem of finding such an author through the collaboration of two people: N.E. Steenrod, who is an outstanding topologist, and W.G. Chinn, who must be an unusually gifted teacher. The result is admirable.

The authors manage, in a slim paperback, to introduce a reader with only high school mathematics to several basic ideas of both point-set and algebraic topology. Among them are continuity, compactness, and connectedness in Euclidean space R^n, homotopy and the winding number of curves in the plane. They motivate these concepts by proving carefully two important existence theorems from analysis, namely the Intermediate Value Theorem and its 2-dimensional analogue. Applications given include the fundamental theorem of algebra, the existence of fixed points of mappings and singularities of vector fields as well as the pancake and the ham sandwich problems, and should therefore convince both the idealists and the materialists of the use of topology.

The book is written in a clear and lively style and well illustrated. The authors succeed in combining intuitive and well motivated introductions of ideas with rigorous proofs. Mathematical thinking is further stimulated by paragraphs like the one on 'When is an argument not a proof?' and through many pretty exercises. Detailed answers are given.

Although the book requires no mathematical knowledge beyond high school level, it should attract even a fairly sophisticated reader who wants a readable and up-to-date introduction to an important branch of modern mathematics. It will be of special interest to those bright students who are dissatisfied with the usual mixture of proof and plausibility given in a first calculus course and would like to see a proper treatment of some of the basic theorems of analysis. The book deserves a wide readership.

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An Introduction to Complex Analysis in Several Variables, by L. Hormander. Van Nostrand, University series in higher Mathematics, 1966. 208 pages. $8.20.

Les mérites de ce livre me paraissent très grands. Il offre au débutant (ayant de bonnes connaissances en Analyse fonctionnelle et Algèbre homologique) un accès rapide à des problèmes situés au coeur