

and problems.

Some mathematics courses progress on a wide front and advance little. Here we have a narrow but deep intrusion into the unknown territory. I should like to see our undergraduates take this course as early as possible, as it provides much motivation for what is done in other courses now given.

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Recursive functions, by Rozsa Peter. Academic Press Inc., New York, 1967. 300 pages. \$13.50.

This is a welcome though belated translation of the German original which appeared first in 1951 and slightly revised in 1957. There is a new appendix "On the generalization of the theory of recursive functions for abstract sets of appropriate structure as domains of definition". This text is still a standard work on primitive recursive functions. General recursiveness is treated as a useful generalization, but the author is not convinced that one ought to equate it with calculability. By the way, in spite of the Hungarian custom of placing one's surname first, the author is a woman.

J. Lambek, McGill University

536 Puzzles and curious problems, by Henry E. Dudeney Saunders of Toronto Ltd., 1967. 428 pages. \$9.75.

The author, whose name is surely an anglicized form of "Dieudonné", lived from 1857 to 1930. He was a self-taught mathematician and professional puzzlemaker. This delightful collection is a classic, second only to "Mathematical Recreations" by W. W. Rouse Ball, to which however it does not measure up in mathematical sophistication. The problems have been rearranged and reclassified by Martin Gardner, known to readers of the "Scientific American". He claims that he has hardly altered the original text, aside from changing "petrol" and "shilling" to their American equivalents. There are "arithmetical and algebraic problems", including clock and weight puzzles, "geometrical problems", including paper folding puzzles, "combinatorial and topological problems", including magic square and tree planting puzzles, and a few smaller subdivisions. Answers are provided at the end, including the author's solution of the 4 colour problem, with comments by the editor pointing out the fallacy. The text is printed in large type and amply illustrated. It attracted this reviewer's 11 year old son, who informs me that some of the solutions are really quibbles. However, he did appreciate the book.

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