

BOOK REVIEWS

BUDDEN, F. J. AND WORMELL, C. P., *Mathematics through Geometry* (Pergamon Press, 1964), ix+230 pp., 25s.

A defence of the traditional role of Pure Geometry to "S" level standard, with specific proposals for improvement. Viewpoints provoking agreement or violent disagreement occur on nearly every page. The overall effect is stimulating. Have, in fact, the long-term results of discarding so much previously deemed of worth been sufficiently assessed? Certainly no one who has to make the choice between what to omit and what to retain, should fail to read this book. Those who continue to teach traditional topics should make sure of a copy.

S. READ

MEYER, HERMAN, *Precalculus Mathematics* (The University Series in Undergraduate Mathematics, Van Nostrand), xi+365 pp., 58s. 6d.

A competent, modern, axiomatic review of the basic portions of school algebra, trigonometry and coordinate geometry, with intuitive amplification where relevant. Pure geometry, probability and detailed solution of triangles are omitted in favour of 2- and 3-dimensional vectors. Set notation is used throughout. Complex numbers are introduced as ordered pairs and the treatment includes de Moivre. There is consistent emphasis upon logical development, with consequent curtailment of manipulation. Altogether a scholarly book.

S. READ

SACHS, J. M., RASMUSSEN, R. B. AND PURCELL, W. G., *Basic College Mathematics*, 2nd Edition (Allyn and Bacon), ix+331 pp., \$7.50.

Attempts an axiomatic review of school mathematics. Set notation is explained, but not much used. Standard techniques of arithmetic and algebra to "O" level are developed conventionally, while trigonometry and formal coordinate geometry are omitted. Euclidean pure geometry is briefly discussed and there is an introductory chapter on statistics, followed by another on "assorted topics". The book attempts too much and leaves an impression of diffuseness without underlying unity.

S. READ

BARI, NINA K., *A Treatise on Trigonometric Series* (Pergamon Press, 1964), Volume I, xxiii+553 pp., 84s.; Volume II, xix+508 pp., 105s.

After some introductory material, the first volume of Professor Bari's treatise begins with a chapter of 166 pages devoted to basic theorems on trigonometric series. This chapter contains rather less material than does the Cambridge Tract by Hardy and Rogosinski, and it demands appreciably less of the reader. It is followed by chapters on Fourier coefficients, convergence at a point, Fourier series of continuous functions, convergence and divergence in a set less than the whole interval (e.g. almost everywhere), and "adjustment" of functions. The chapters in the second volume are on summability, conjugate series, absolute convergence, series with decreasing coefficients, lacunary series, general trigonometric series, absolute convergence of general trigonometric series, uniqueness of a trigonometric series expansion, and the representation of a function by trigonometric series. To the original edition, published in Russian in 1961, Professor P. L. Ul'yanov has added problems at the end of each chapter of Volume I; the more difficult of these are accompanied by a hint or reference, or occasionally by a warning that the problem is as yet unsolved.