

Correspondence

DEAR EDITOR,

During the course of extending a series of numerical results of mine published in *Nature* I came across the very close approximations

$$e \approx \sqrt[5]{\pi^5 + \pi^4} \quad \text{and} \quad \left(\frac{\pi}{e}\right)^8 \approx \frac{10}{\pi}$$

and thought that they might interest your readers.

Yours sincerely,
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Reviews

Guides to assessment in education: mathematics, by Charles Bentley and David Malvern.
Pp. 94. £2.95. 1983. ISBN 0-333-31912-6 (Macmillan Education)

When one picks up a book on 'Assessment in Education' one can expect to find an emphasis on theory, and much use of none-too-familiar statistical procedures. Often there are few practical examples, and those presented tend to be far removed from the reader's everyday classroom experiences.

This book is refreshingly different. It begins in the mathematics classroom and remains firmly there! By the fourth line of chapter one, for example, we are already considering a problem: "A farmer owns a rectangular field with sides 200 m and 80 m . . ." There follows an illustrative discussion of *what* is being asked, *why* it is being asked, and *how* to assess the solutions presented by four pupils.

The chapter titles indicate the considerable scope of this small volume:

- Ch 1 Assessment and mathematics
- Ch 2 Mathematics questions
- Ch 3 Marking and marks
- Ch 4 Standardised tests
- Ch 5 Testing for progress
- Ch 6 Diagnosis
- Ch 7 Records and reports
- Appendix Compendium of tests

The standard theoretical treatment is not eschewed—validity, reliability, measurement scales, criterion and norm referencing, facility and discrimination indices, etc., are all considered, from the point of view of the mathematics teacher.

This, then, is a very readable and thought-provoking book which can be warmly recommended to all practising teachers of mathematics, and should prove a useful text for teachers in training.

D. R. GREEN

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