Cauchy's geometrical proof of the addition formula is given, so that conciseness has been sacrificed at times in order to avoid the simplest algebraical geometry. Two pages devoted to "Dip of the Horizon" seem unnecessary. The treatment of the inequality $\sin\theta < \theta < \tan\theta$ is curious. The author first gives what he calls a "strict proof" based on the "obvious" relation between the areas of the two triangles and the sector, and adds that the student may satisfy himself of the truth of the inequality intuitively by examining a figure, which makes it clear that chord, arc and tangent are in ascending order of magnitude! The language is often irritating: "The line *OP* is to be regarded as plus in any position", "an angle α°, where α is any finite positive magnitude" There are many redeeming features, however. The printing is good, and Mr. Durell's well-known tables are incorporated. The worked examples are numerous, there are valuable general hints, and notes on dimensions, symmetry, and irreversible operations. The absence of graphs, latitude and longitude and other simple three-dimensional work invalidates the author's claim to suit the O. and C. Joint Board Additional Mathematics.

Mr. Piggott's book is decidedly readable. Each stage of the work is made to grow from some practical need. The treatment of projections is based on simple problems in navigation, and gyro-compass bearings are used to introduce the general angle. Ideas of wider application, such as vectors, orthogonal projection, polar coordinates, simple harmonic vibration, and damped vibrations all fall naturally into place, and are not simply side-tracks. The boy who has worked through this book will not only have nothing to unlearn, but will have acquired a very sure foundation for more advanced work. There is an air of reality and reasonableness throughout, and if the author's position at the R.N.C., Dartmouth, is responsible for the slightly nautical flavour, surely it is as natural to talk about ships in elementary trigonometry as about shops in elementary arithmetic.

It is surprising to find the formula for $\sin \frac{1}{2}A$ preferred to that for $\tan \frac{1}{2}A$ in the solution of triangles with three sides given. The use of cologarithms (converted mentally from ordinary logarithm tables) is advocated. No review of any earlier edition has appeared in the *M. G.*, and for the benefit of those familiar with the first (1919) edition it may be said that the new version gives the ordinary "coordinate" definitions of the ratios for angles measured counter-clockwise from the x-axis, as well as for angles measured clockwise from "north", and an appendix dealing with the haversine has been displaced by an extra set of exercises on identities and transformations.

Mr. Piggott has been less fortunate in his choice of publisher than Mr. Cox. His only slightly larger book costs two and a half times as much, contains no tables, and the examples are printed in rather small type. Perhaps these defects can be remedied in a revised edition, and so enable a valuable work to reach a wider public. Mr. Piggott does all that he sets out to do, and more. His book in fact suits in content and in spirit the O. and C. Joint Board Additional Mathematics: in concentrating on teaching his subject as something worth knowing he is more likely to "get you through the exam." than any *ad hoc* crammer.

A. P. R.

CORRIGENDA.

October, 1938, p. 368, l. 4 below Fig. 5. Read "*DAB* less *K* is greater than *EBA*; that is, *ADE* is greater than *ABE*"

December, 1938, Note 1343, pp. 506-7. In the determinant (i), last column, third row, for "1" read "0" In the statement (iii), after "$X_1+X_2=\xi_1$" insert "$X_1-X_2=\xi_2$" Note 1344, p. 508. Professors Piaggio and Synge have pointed out that the proof is invalid, from confusion between dq_r, standing for $\dot{q}_r dt$, and δq_r.

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