

41[A, D].—HANS A. LARSEN, *Natural Sines and Trigonometrical Quadratic Surds to 50 Decimal Places*, MS of one folded sheet (4 pages) deposited in UMT File.

In an accompanying explanatory note the author describes this manuscript table as the result of a check and extension of the corresponding data given to 30D by Herrmann [1]. In the present tables we find carefully checked 50D values of $\sin x$ for $x = 1^\circ(1^\circ)90^\circ$ and of comparable approximations to the 15 quadratic surds appearing in the closed expressions for the sines of integral multiples of 3° , all computed on a Facit desk calculator.

More extended approximations (to 230D) to the sines of 10° , 50° , and 70° are also included; they were evaluated as the roots of the appropriate cubic equation.

As a result of these calculations the author detected six rounding errors in Herrmann's values and three similar errors in Gray's 24D approximations [2] to the trigonometric quadratic surds. These errata are described elsewhere in this issue.

J. W. W.

1. HERRMANN, "Bestimmung der trigonometrischen Functionen aus den Winkeln und der Winkel aus den Functionen, bis zu einer beliebigen Grenze der Genauigkeit," *Kaiserliche Akademie der Wissenschaften, Wien, Mathematisch-naturwissenschaftliche Classe, Sitzungsberichte*, v. 1, 1848, p. 164–180. The table of sines (p. 176–177) is reprinted in the National Bureau of Standards Applied Mathematics Series, v. 5, *Table of Sines and Cosines to Fifteen Decimal Places at Hundredths of a Degree*, U. S. Government Printing Office, Washington, D. C., 1949.

2. P. GRAY, "Values of the trigonometrical quadratic surds," *Messenger of Mathematics*, v. 6, 1876, p. 105–106.

42[F].—C. CHABAUTY, ET AL, *Introduction à la Théorie des Nombres*, AND PAUL ERDÖS, *Quelque problèmes de la Théorie des Nombres*, Monographies de *L'Enseignement Mathématique*, No. 6, Société Mathématique Suisse, Geneva, 1963, 136 p., 24 cm. Price 22 Swiss Francs.

These two short books, which are bound together, form a valuable guide for students to some of the literature and problems of modern number theory.

The first book contains: (a) short introductions to five fields of number theory; and (b) brief descriptions of twelve topics including pertinent references to the bibliography of 46 items that follows. The six chapters of the book have appeared previously in different issues of *L'Enseignement Mathématique* and are listed below:

"Introduction à la géométrie des nombres," by C. Chabauty

"Introduction à l'analyse diophantienne," by F. Châtelet

"Problèmes d'approximation diophantienne," by R. Descombes

"Introduction à la théorie des nombres algébriques," by Ch. Pisot

"Le théorème de Thue-Siegel-Roth," by G. Póitou

"Bibliographie de l'arithmétique," by A. Châtelet

In his article F. Châtelet suggests that Fermat's Last Theorem may not be due to Pierre Fermat at all, but rather to his son Samuel. He states that our only access to Pierre Fermat's notes is in the edition of them put out by the son Samuel, and that the latter may have misunderstood P. Fermat, who perhaps merely meant that the proposition has been proven for the exponents 3 and 4.

The book by Erdős (55 pages long) contains statements of 76 problems together with discussion and references. The problems are of a considerable variety both as regards their subject matter and their status. Most of them are related to papers