

In the notes on page 54, the statements concerning perfect numbers and the largest known prime are not up to date.

However, the author has succeeded in his aim to write an attractive account of the main properties of periodic decimals and to use that topic as a concrete means to acquaint the immature reader with some important theorems of the theory of numbers and to arouse his curiosity to pursue the theory further.

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*Compendio de Álgebra de Abenbêder.* Texto árabe, traducción y estudio por JOSÉ A. SÁNCHEZ PÉREZ. Madrid, 1916. (Junta para Ampliación de Estudios e Investigaciones científicas, Centro de Estudios históricos.)

THE translator, who has an enthusiastic hope that some day an adequate history of mathematics in Spain will be written, sees in this manuscript a contribution of material for such a book. But the translation is of value for another reason: it makes accessible to the mathematical world in general another of the works compiled by the Mussulmans between the eighth and fifteenth centuries. Sr. Pérez begins his introduction with a brief account of certain phases of the history of mathematics in his own country and closes it by thirty pages of discussion of questions relating to the contents of this document and its authorship and date.

The *Compendio de Álgebra* is contained in manuscript 936 of the Escorial library (Arabic section). There are forty-six folios in Arabic characters of Spanish type. The date, as given in the document, is the year 744 since the Hegira. Abenbêder understands that the object of algebra is the solution of equations. He explains his subject in the form of ordinary discourse, without employing the notations of algebra. The work is divided into two parts—the theoretical and the practical. In the former, the first six “questions” treat the six forms of equations given by Al-Khowarizmi. Some of the particular equations used are those met with so frequently in these early texts: for example, (in our notation)  $x^2 + 10x = 39$  and  $x^2 + 21 = 10x$ . There are also six “chapters” explaining the fundamental operations with the square roots of numbers and six others dealing with the rules of signs and with the squares and cubes of the unknowns.