Mathematics in Ancient Egypt-A Contextual History
by ANNETTE IMHAUSEN


Reviewer: Ricardo Moreno-Castillo

Mathematics in ancient Egypt is an exhaustive study of Egyptian mathematics. It consists of an introduction and five chapters.

The first chapter, entitled “Prehistory and Archaic Period” treats the issue of the invention of writing and numerical notations.

The second one, “The Ancient Empire” deals with metric systems (units of length, surface, capacity and weight) and the notation for fractions.

The third chapter, “The Middle Empire” reviews the most important papyri that serve as a source of knowledge for the mathematics of Egypt (papyrus Rind, Berlin papyrus, Moscow papyrus), and discusses the arithmetic techniques (multiplication, division of integers and fractions), decomposition tables of fractions of the form $2/n$ and the application of mathematics to architecture and land surveying.

The fourth chapter, “The New Empire” studies the contents of other papyri (papyrus Harris, papyrus Wilbor ...) and some aspects of the mathematics related to the death, the art and the architecture.

Finally, the fifth chapter, “Greco-Roman period” studies the papyri of Cairo, Carlsberg, Griffith, and Heidelberg, and deals with the demotic multiplication and division and its application to surface calculus.