1014-01-713 Kim Plofker* (Kim_Plofker@alumni.brown.edu), Mathematics Institute, University of Utrecht, Postbus 80010, 3508 TA Utrecht, Netherlands. Decimal and sexagesimal computation in Indian mathematics.
Decimal counting is attested, at least in verbal form, in ancient Indian literature from its very beginning. Centuries later, sexagesimal or base-60 place-value quantities also appeared in Indian texts, along with special arithmetic techniques for calculating with them. This paper examines how Indian base-60 arithmetic emerged, and what became of it in the overwhelmingly decimal practice of place-value computing. (Received September 22, 2005)

