

1038-11-207

Bhaskara Rao Kopparty* (bkopparty@isugw.indstate.edu), Mathematics and Computer Science, Indiana State University, Terre Haute, IN 47802. *Practical numbers and Egyptian fraction theorem*. Preliminary report.

A positive integer n is called a practical number if every smaller positive integer is a sum of distinct divisors of n . Practical numbers are useful in proving Egyptian fraction theorem. In this talk we shall give several new properties of practical numbers and identify some new practical numbers. This in turn gives us a new proof of the Egyptian fraction theorem. We shall also mention some related problems. (Received February 10, 2008)