Year: 2007 | Vol.: 71 | Fasc.: 1-2

Title: An order result for the exponential divisor function

Author(s): László Tóth

The integer $d = \prod_{i=1}^{s} p_i^{b_i}$ is called an exponential divisor of $n = \prod_{i=1}^{s} p_i^{a_i} > 1$ if $b_i \mid a_i$ for every $i \in \{1, 2, \ldots, s\}$. Let $\tau^{(e)}(n)$ denote the number of exponential divisors of n, where $\tau^{(e)}(1) = 1$ by convention. The aim of the present paper is to establish an asymptotic formula with remainder term for the r-th power of the function $\tau^{(e)}$, where $r \geq 1$ is an integer. This improves an earlier result of M. V. SUBBARAO [?].

Address:

László Tóth Institute of Mathematics and Informatics University of Pécs Ifjúság u. 6 7624 Pécs Hungary