

Zbl 217.03101

Erdős, Paul

Some problems in number theory (In English)

Computers in Number Theory, Proc. Atlas Sympos. No.2, Oxford 1969, 405- 414 (1971).

[For the entire collection see Zbl 214.00106.]

Several solved and unsolved problems are discussed. Here we just mention a few of them. Let $m \geq 2k$. Is it true that $\binom{m}{k}$ has a divisor d satisfying $cm < d < m$ where c is an absolute constant? Is it true that for every $\epsilon > 0$ there is a k_0 so that for $k > k_0(\epsilon)$ $k!$ is the product of k integers all greater than $(1 - \epsilon)k/e$? Determine or estimate the smallest integer $n_k \geq 2k$ so that all prime factors of $\binom{n_k}{k}$ are greater than k . Selfridge and Erdős proved $n_k > k^{1+c}$ and that n_k is not monotonic.

Classification:

11B65 Binomial coefficients, etc.

11B75 Combinatorial number theory

00A07 Problem books