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**Zbl 429.05047**

**Erdős, Paul**

*Some old and new problems in various branches of combinatorics.* (In English)

**Proc. 10th southeast. Conf. Combinatorics, graph theory and computing, Boca Raton 1979, Vol. I, Congr. Numerantium 23, 19-37 (1979).**

[For the entire collection see Zbl 418.00002.]

The author begins by listing eighteen earlier papers of his consisting mainly of open problems in combinatorial mathematics. Then he gives a progress report on some of his favorite problems and states a few recent problems. Finally, he gives a proof of the following result. Let $A(m;k)$ denote the least common multiple of $m+1,\ldots,m+k$, and let $m_k$ be the smallest integer for which $A(m_k;k) > A(m_k+k;k)$; then $m_k(k \to \infty$ as $k \to \infty$.

*J.W.Moon*

Classification:
05C35 Extremal problems (graph theory)
00A07 Problem books
05B99 Designs and configurations
05C15 Chromatic theory of graphs and maps
11A99 Elementary number theory

Keywords:
extremal problems; random graphs; chromatic graphs