

Zbl 335.05002

Erdős, Paul

Problems and results in graph theory and combinatorial analysis. (In English)

Proc. 5th Br. comb. Conf., Aberdeen 1975, 169-192 (1976).

[For the entire collection see Zbl 316.00006.]

In this paper the authors has given a valuable compendium of unsolved problems on various aspects of combinatorics and graph theory, accompanied by summaries of what has been achieved so far towards their solution and that of cognate problems. The problems are nearly all finite, and most of them are new. The author has included some old problems on the ground that they are still of interest, or have been insufficiently studied. The problem treated are too numerous to be listed in detail in this review; they are concerned with such varied topics as the intersection properties of families of subsets, the structure of bipartite and other graphs, and chromatic properties of graphs and hypergraphs. There are many extremal problems relating to graphs and hypergraphs, some problems on Ramsey numbers, and a large number of miscellaneous problems.

R.C.Read

Classification:

05-02 Research monographs (combinatorics)

05Cxx Graph theory

05Bxx Designs and configurations

05A05 Combinatorial choice problems

05C35 Extremal problems (graph theory)

00A07 Problem books