

Zbl 194.25102

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Problems and results in chromatic graph theory (In English)

Proof Tech. Graph Theory, Proc. 2nd Ann Arbor Graph Theory Conf. 1968, 27-35 (1969).

[For the entire collection see Zbl 193.28103.]

Several problems and results in graph theory are discussed mostly connected with chromatic numbers. Here I only state some of those questions which have been solved in the mean time. Hajnal proved that an \aleph_1 chromatic graph contains for every $n > n_0$ a circuit of n edges. Pósa constructed a four chromatic critical graph having more than $n^2/16$ edges and J. Spencer constructed a graph of n vertices which has more than $n - \log n / \log 2 - c$ cliques of different sizes. None of these results is published as yet.

Classification:

05C15 Chromatic theory of graphs and maps

00A07 Problem books