Zbl 571.05035

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The Ramsey number for the pair complete bipartite graph-graph of limited degree. (In English)

Graph theory with applications to algorithms and computer science, Proc. 5th Int. Conf., Kalamazoo/Mich. 1984, 163-174 (1985).

[For the entire collection see Zbl 564.00004.]

Let F and G be finite connected graphs. The Ramsey number $r(F,G)$ is defined to be the smallest integer r so that, if the edges of the complete graph on r vertices are colored with two colors, then either there is a copy of F with all of its edges colored with the first or a copy of G colored with the second color. Fix F and define G to be F-good if $r(F,G) = (\chi(F)-1)(p(G)-1)+s(F)$, where $\chi(F)$ is the vertex chromatic number of F, $p(G)$ is the number of vertices of G and $s(F)$ is the smallest number of vertices in some color class of F, under all $\chi(F)$ vertex colorings of F. Let F be a complete bipartite graph. This paper gives conditions on a graph G under which it will be F-good.

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Classification:
05C55 Generalized Ramsey theory

Keywords:
Ramsey number; vertex colorings; complete bipartite graph; F-good