

Size Multipartite Ramsey Numbers for Small Paths Versus Stripes

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Abstract. For graphs G and H , the size balanced multipartite Ramsey number $m_j(G, H)$ is defined as the smallest positive integer s such that any arbitrary two red/blue coloring of the graph $K_{j \times s}$ forces the appearance of a red G or a blue H . In this paper we find the exact values of the multipartite Ramsey numbers $m_j(P_3, nK_2)$ and $m_j(P_4, nK_2)$.

Keywords: Ramsey theory, multipartite Ramsey numbers

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