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$m_i(P_4,G)$ for all Graphs G on 4 Vertices

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Abstract. Let $j \ge 3$. Given that $m_j(H,G)$ denotes the smallest positive integer *s* such that $K_{j\times s} \rightarrow (H,G)$. In this paper, we exhaustively find $m_j(P_4,G)$ for all 11 non-isomorphic graphs *G* on 4 vertices, out of which 6 graphs *G* are connected and the others are disconnected.

Keywords: Ramsey theory, Multipartite Ramsey numbers

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