www.researchmathsci.org
DOI: http://dx.doi.org/10.22457/apam.v13n1a2

## Size Multipartite Ramsey Numbers for $\boldsymbol{K}_{4} \boldsymbol{e} \boldsymbol{e}$ Versus all Graphs up to 4 Vertices

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Received 14November 2016; accepted 30December 2016
Abstract.Let $G$ and $H$ be two simple subgraphs of $K_{j \times s}$. The smallest positive integer $s$ such that any red and blue colouring of $K_{j \times s}$ has a copy of red $G$ or a blue $H$ is called the multipartite Ramsey number of $G$ and $H$. It is denoted by $m_{j}(G, H)$. This paper presents exact values for $m_{j}\left(B_{2}, G\right)$ where $G$ is a isolate vertex free graph up to four vertices.

Keywords: Graph Theory, Ramsey Theory
AMS Mathematics Subject Classification (2010): 05C55, 05D10

