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M. M. Jaradat^{*} (mmjst4@qu.edu.qa), Department of Mathematics, Statistics and Phy, Qatar University, Doha, 2713, Qatar, and M S Bataineh and T. Vetrik. *The Ramsey numbers for theta graphs versus the wheel of order* 5.

The study of exact values and bounds on the Ramsey numbers of graphs forms an important family of problems in the extremal graph theory. For a set of graphs S and a graph F, the Ramsey number R(S, F) is the smallest positive integer r such that for every graph G on r vertices, G contains a graph in S as a subgraph or the complement of G contains F as a subgraph. Ramsey numbers of various graphs including theta graphs and wheels have been extensively studied. We extend known results in the area by presenting exact values of the Ramsey numbers $R(\theta_n, W_5)$ for $n \ge 5$, where θ_n is the set of theta graphs of order n and W_5 is the wheel graph of order 5. (Received August 31, 2018)