1146-05-32   **M.M.M. Jaradat*** (`mmjst4@qu.edu.qa`), Department of Mathematics, Statistics and Phy, Qatar University, Doha, Qatar, and **M 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 $n \geq 5$, where θ_n is the set of theta graphs of order n and W_5 is the wheel graph of order 5.