

1114-11-337

Lisa Joy Mueller* (exceedinglyhappy@csu.fullerton.edu), 1981 Berkshire Drive, Fullerton, CA 92833, and **Nick Bohall, Kajal Chokshi, Jackie Emrich** and **Abdollah Khodkar**.

Edge-Magic Total Labelings.

A graph with v vertices and e edges has an edge-magic total labeling if the vertices and edges can be labeled with the numbers 1 through $v + e$ such that the sum of any edge and its two adjacent vertices adds up to the same number. The main focus for this research project has been to explore different types of graphs to see which are edge-magic in general or for an entire spectrum of possible sums according to how many vertices and edges a given graph contains. (Received September 01, 2015)