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**Peter J Slater\*** ([slaterp@math.uah.edu](mailto:slaterp@math.uah.edu)), Mathematical Sciences Department, University of Alabama in Huntsville, Huntsville, AL 35899. *Neighborhood sums under graph labelings.*

Problems involving assigning weights  $w_1, w_2, \dots, w_n$  to the vertices of a graph include minimax, maximin, and mini-spread problems for open/closed neighborhoods. Such problems will be discussed in detail. An investigation of these problems leads to a consideration of many graph theory problems (such as domination, independence, and hamiltonian cycle) as labeling problems. This viewpoint will be briefly explored. (Received January 20, 2011)