

Sum Degree of No Class

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Abstract

Given a distribution D of pebbles on the vertices of graph, G , of order n , we say that a *pebbling move* consists of removing two pebbles from a vertex and then placing one pebble on an adjacent vertex. The *pebbling number* of G , $\pi(G)$, is the least integer m such that, regardless of how m pebbles are distributed on the vertices of G , after a sequence of pebbling moves we can move a pebble to any vertex. It is easy to see that $\pi(G) > n - 1$ since placing each of $n - 1$ pebbles on a distinct vertex leaves one vertex without a pebble and no pebbling moves possible. Graphs for which $\pi(G) = n$ are known as Class 0 graphs. We give a degree sum condition, which is best possible, that gives a guarantee that G is Class 0.