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Neighborhood-restricted $[\geq 3]$ -Chromatic Colorings.

A (closed) neighborhood-restricted $[\geq 3]$ -coloring of a graph G is an assignment of colors to the vertices of G such that at least three colors are assigned in any closed neighborhood, that is, for every vertex v in G , the vertex v and its neighbors are in at least three different color classes. The $[\geq 3]$ -*chromatic number* is defined as the minimum number of colors in any $[\geq 3]$ -coloring of G . We study the $[\geq 3]$ -chromatic number for several classes of graphs and establish bounds for certain families of graphs.

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