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Domination and Digital Convexity Parameters

A set S of vertices in a graph G with vertex set V is *digitally convex* if for every vertex $v \in V$, $N[v] \subseteq N[S]$ implies $v \in S$. The collection of all digitally convex sets is called the *digital convexity* of G . We determine an expression for the Caratheodory number of a graph, with respect to the digital convexity, in terms of a local domination parameter and we find sharp bounds for the Radon number of a graph in terms of two parameters that appear in the well-known domination chain.