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Peter John Slater* (slater@math.uah.edu), Math Sciences and Computer Science Depts,
University of Alabama in Huntsville, Huntsville, AL 35899. *Colored problems are NP-complete for paths.*

For "colored" problems for graphs one is given a partition $S = S_1, S_2, \dots, S_t$ of vertex set $V(G)$. Solution sets for the respective problems require one to use all or none of the vertices in each color class S_i . It will be shown that the colored-independence and colored-domination problems are NP-complete even when graph G is restricted to be a path and under various restrictions for partition S . (Received September 11, 2007)