عنوان مقاله:
Intersection graphs associated with semigroup acts

محل انتشار:
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خلاصه مقاله:
p>The intersection graph \\mathbb{Int}(A) of an S-act A over a semigroup S is an undirected simple graph whose > vertices are non-trivial subacts of A, and two distinct vertices are adjacent if and only if they have a non-empty intersection. In this paper, we study some graph-theoretic properties of \\mathbb{Int}(A) in connection to some algebraic properties of A. It is proved that the finiteness of each of the clique number, the chromatic number, and the degree of some or all vertices in \\mathbb{Int}(A) is equivalent to the finiteness of the number of subacts of A. Finally, we determine the clique number of the graphs of certain classes of S-acts.

کلمات کلیدی:
S-act, intersection graph, Chromatic number, Clique number, weakly perfect graph