

1011-08-183

Theodore A. Rice* (tarice@iastate.edu), Department of Mathematics, Iowa State University, Ames, IA 50011. *Greedy Algebras*.

Given axioms for a class of algebras, a greedy algorithm is used to generate models on the set of natural numbers. Following initialization, the algebra is constructed inductively by always choosing the result of an operation on a given list of arguments to be the smallest possible natural number that is consistent with the axioms. Quasigroups are used as the primary example. For each natural number, known as the seed, a simple quasigroup is constructed. There are no non-trivial homomorphisms between the quasigroups obtained from distinct seeds. (Received August 25, 2005)