

We will study Lindenbaum algebras and algebras of definable subsets of selected first order theories: constants theory for  $\aleph_a$ , Presburger, Robinson, Peano and standard arithmetic, successor theory, successor theory with zero, theory of dense linear orders without endpoints, theory of discrete linear orders, random graph theory and theory of algebraically closed fields. For finite algebras we will determine their cardinality, for countable algebras we will determine whether they are atomic or atomless and for some of them we will carry out classification up to isomorphism using algebras FA, ASA and CA. For this purpose we will prove several general theorems.