

Graphs of Functions and Their Combinatorial Properties

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Each function from a set to itself defines a certain equivalence relation on that set. The directed graph of this function is divided into connected components. In general, the connection between the analytical properties of a function and the combinatorial properties of its graph is of particular interest. This paper is dedicated to the mentioned topics. It discusses the combinatorial properties of the corresponding graphs and mono-unary algebras of basic elementary functions, Hamel functions, and the Cantor function.