

In the presented work we are studying, whether some properties of sets (functions) can be separably reduced. It means, whether it is true, that a set (function) has given property if and only if it has this property in a special separable subspace, dependent only on the given set (function). We are interested in properties of sets "be dense, nowhere dense, meager, residual and porous" and in properties of functions "be continuous, semicontinuous and Fréchet differentiable". Our method of creating separable subspaces enables us to combine our results, and so we easily get separable reductions of function properties such as "be continuous on a dense subset", "be Fréchet differentiable on a residual subset", etc. Finally, we show some applications of presented separable reduction theorems, which enable us to show, that some propositions proven by Zajíček, Lindenstrauss and Preiss hold under other assumptions as well.