

ABSTRACT. It is well-known that every monoidal category is equivalent to a strict one. We show that for categories of sets with additional structure (which we define quite formally below) it is not even necessary to change the category: The same category has a different (but isomorphic) tensor product, with which it is a strict monoidal category. The result applies to ordinary (bi)modules, where it shows that one can choose a realization of the tensor product for each pair of modules in such a way that tensor products are strictly associative. Perhaps more surprisingly, the result also applies to such nontrivially nonstrict categories as the category of modules over a quasibialgebra.