## On Essential g-Supplemented Modules

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## Abstract

Let M be an R-module. If every essential submodule of M has a g-supplement in M, then M is called an essential g-supplemented (or briefly eg-supplemented) module. If every essential submodule has ample g-supplements in M, then M is called an amply essential g-supplemented (or briefly amply eg-supplemented) module. In this work, some properties of these modules are investigated. It is proved that every factor module and every homomorphic image of an amply eg-supplemented module are amply eg-supplemented. Let M be a projective and eg-supplemented module. Then every finitely M-generated R-module is amply eg-supplemented.

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