

Locally graded quotients of locally graded groups

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ABSTRACT

A group G is said to be *locally graded* if every nontrivial, finitely generated subgroup of G has a nontrivial finite image. Every group can occur as a quotient of a locally graded group.

It is shown that the largest subgroup and quotient closed interior of locally graded groups is the class of groups in which every simple quotient of every finitely generated subgroup is finite. We investigate conditions under which a given quotient of a locally graded group is locally graded and the result is used to get more precise conditions for a quotient of a linear group to be locally graded.

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