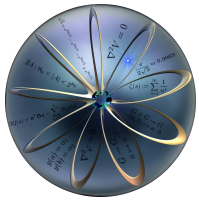

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π-separable group

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Let π be a set of prime numbers. A finite group G is called *π-separable* if there exists a composition series

$$\{1\} = G_0 \lhd \cdots \lhd G_n = G$$

such that each G_{i+1}/G_i is either a `http://planetmath.org/PiGroupsAndPiGroups`π-group or a `http://planetmath.org/PiGroupsAndPiGroups`π'-group.

A $\{p\}$-separable group, where p is a prime number, is usually called a *p-separable* group.

π-separability can be thought of as a generalization of solvability for finite groups; a finite group is π-separable for all sets of primes if and only it is solvable.