

planetmath.org

Math for the people, by the people.

π -groups and π' -groups

Canonical name pigroups Andpigroups
Date of creation 2013-03-22 13:17:51
Last modified on 2013-03-22 13:17:51
Owner Algeboy (12884)
Last modified by Algeboy (12884)

Numerical id 9

Author Algeboy (12884)

 $\begin{array}{ll} \text{Entry type} & \text{Definition} \\ \text{Classification} & \text{msc } 20\text{D}20 \\ \text{Classification} & \text{msc } 20\text{F}50 \\ \text{Defines} & \pi\text{-group} \\ \text{Defines} & \pi'\text{-group} \end{array}$

Let π be a set of primes. A torsion group G is called a π -group if each prime dividing the order of an element of G is in π and a π' -group if none of them are. Typically, if π is a singleton $\pi = \{p\}$, we write p-group and p'-group for these.

Remark. If G is finite, then G is a π -group if every prime dividing |G| is in π .