Order of a group

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June 19, 2017

1 DEFINIZIONE

The order of a group is its cardinality, i.e., the number of elements in its set. Also, the order, sometimes period, of an element a of a group is the smallest positive integer m such that $a^m = e$ (where e denotes the identity element of the group, and a^m denotes the product of m copies of a). If no such m exists, a is said to have infinite order.

NB: La stessa definizione può essere data con la notazione additiva.

2 NOTAZIONE

The order of a group G is denoted by $ord(G)$ or $|G|$ and the order of an element a is denoted by $ord(a)$ or $|a|$.

3 APPROFONDIMENTI

- EN.WIKIPEDIA.ORG: Order (group theory) [**?**]
- EN.WIKIPEDIA.ORG: Lagrange's theorem (group theory) [**?**]