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0.1 Group order

For finite groups, each element e has:

$e^n = I$

For some $n \in \mathbb{N}$

Where I is the identity element.

The order of the group is the smallest value of n such that that holds for all elements.

For example in the multiplicative group $G = \{-1, 1\}$ the order is 2.

Or:

$|G| = 2$

Additionally

$|-1| = 2$

$|1| = 1$