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normalizer condition

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Defines	N-group

A group is said to satisfy the *normalizer condition* if every proper subgroup is properly contained in its own normalizer. That is, a group G satisfies the normalizer condition if and only if $H < N_G(H)$ for all $H < G$. A group that satisfies the normalizer condition is sometimes called an *N-group*.

Every nilpotent group is an N-group, and every N-group is locally nilpotent. In particular, a finitely generated group is an N-group if and only if it is nilpotent.

A group satisfies the normalizer condition if and only if all its subgroups are ascendant.