# pronormal subgroup

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|---|---|
| Canonical name | PronormalSubgroup |
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| Entry type | Definition |
| Classification | msc 20E99 |
| Defines | pronormal |
| Defines | pronormality |

A subgroup $H$ of a group $G$ is called a *pronormal subgroup* if for all $x \in G$ the subgroups $H$ and $xHx^{-1}$ are conjugate in $\langle H, xHx^{-1} \rangle$.

Some facts about pronormal subgroups:

- Normal subgroups are pronormal.

- Maximal subgroups are pronormal.

- Abnormal subgroups are pronormal.

- Sylow subgroups of finite groups are pronormal.

- The normalizer of a pronormal subgroup is abnormal.

- A pronormal subgroup is normal if and only if it is subnormal.