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conjugacy class

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Related topic	ConjugacyClassFormula

Two elements g and g' of a group G are said to be *conjugate* if there exists $h \in G$ such that $g' = hgh^{-1}$. Conjugacy of elements is an equivalence relation, and the equivalence classes of G are called *conjugacy classes*.

Two subsets S and T of G are said to be *conjugate* if there exists $g \in G$ such that

$$T = \{gsg^{-1} \mid s \in S\} \subset G.$$

In this situation, it is common to write gSg^{-1} for T to denote the fact that everything in T has the form gsg^{-1} for some $s \in S$. We say that two subgroups of G are conjugate if they are conjugate as subsets.