

Isotropy group

Let G be a group and S be a G -set. For an element $s \in S$, the set

$$G_s := \{x \in G : xs = s\}$$

is a subgroup of G . It is called the isotropy group of s . It is also known as the stabilizer group.

If S is a transitive G -set and $s \in S$ is any fixed element, then

$$G/G_s \rightarrow S$$

is an invertible G -map.