

1.1: Abelian group

An **abelian group**, also called a *commutative group*, is a group $(G, *)$ such that

$$g_1 * g_2 = g_2 * g_1$$

for all g_1 and g_2 in G , where $*$ is a [binary operation](#) in G . This means that the order in which the binary operation is performed does not matter, and any two elements of the group commute.

Groups that are not commutative are called **non-abelian** (rather than non-commutative).

Abelian groups are named after Niels Henrik Abel.

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