

Algebra

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Definition: A *group* is an ordered pair $(G, \cdot : G \times G \rightarrow G)$ where G is a set and \cdot is a binary operation, which satisfies the following axioms:

1. Associativity: $(g_1 g_2) g_3 = g_1 (g_2 g_3)$
2. Identity: $\exists e \in G \ni ge = eg = g$