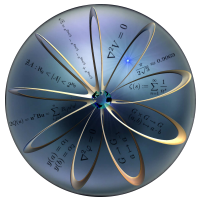

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## superalgebra

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|---|---|
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| Related topic | GradedAlgebra |

A graded algebra $A$ is said to be a **superalgebra** if it has a $\mathbb{Z}/2\mathbb{Z}$ grading. As a vector space, a superalgebra has a decomposition into two homogeneous subspaces, $A = A_0 \oplus A_1$. The homogeneous subspace $A_0$ is known as the space of **even** elements of $A$, and $A_1$ is known as the space of **odd** elements. Let $|a|$ denote the degree of a homogeneous element. That is, $|a| = 0$ if $a \in A_0$ and $|a| = 1$ if $a \in A_1$. The degree satisfies $|ab| = |a| + |b|$.