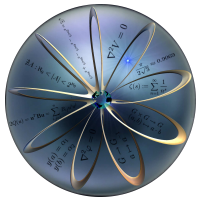

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algebraically dependent

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Let L be a field extension of a field K. Two elements α, β of L are *algebraically dependent* if there exists a non-zero polynomial $f(x, y) \in K[x, y]$ such that $f(\alpha, \beta) = 0$. If no such polynomial exists, α and β are said to be *algebraically independent*.

More generally, elements $\alpha_1, \ldots, \alpha_n \in L$ are said to be algebraically dependent if there exists a non-zero polynomial $f(x_1, \ldots, x_n) \in K[x_1, \ldots, x_n]$ such that $f(\alpha_1, \alpha_2, \ldots, \alpha_n) = 0$. If no such polynomial exists, the collection of α's are said to be algebraically independent.