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module-finite

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Related topic	FinitelyGeneratedRModule
Defines	ring-finite

Let S be a ring with subring R .

We say that S is *module-finite* over R if S is finitely generated as an R -module.

We say that S is *ring-finite* over R if $S = R[v_1, \dots, v_n]$ for some $v_1, \dots, v_n \in S$.

Note that module-finite implies ring-finite, but the converse is false.

If L is ring-finite over K , with L, K fields, then L is a finite extension of K .