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stable subspace

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Entry type	Definition
Classification	msc 00A05
Synonym	invariant subspace
Synonym	stable subset
Synonym	invariant subset

A subset S of a larger set T is said to a *stable subset* for a function $f : T \rightarrow T$ iff $f(S) \subset S$.

Alternative phrasings with the same meaning are:

- f is an invariant subset for f
- f stabilizes S
- S is stable under (the action of) f
- S is invariant under (the action of) f
- S is left stable by/under f
- S is left invariant by/under f