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cut-point

Canonical name	Cutpoint
Date of creation	2013-03-22 13:56:38
Last modified on	2013-03-22 13:56:38
Owner	mathcam (2727)
Last modified by	mathcam (2727)
Numerical id	5
Author	mathcam (2727)
Entry type	Definition
Classification	msc 54D05
Synonym	cutpoint

Theorem Suppose X is a connected space and x is a point in X. If $X \setminus \{x\}$ is a disconnected set in X, then x is a **cut-point** of X [**?**, **?**].

0.0.1 Examples

1. Any point of $\mathbb{R}$ with the usual topology is a cut-point.

2. If X is a normed vector space with $\dim X > 1$, then X has no cut-points [**?**].

References

[1] G.J. Jameson, *Topology and Normed Spaces*, Chapman and Hall, 1974.

[2] L.E. Ward, *Topology, An Outline for a First Course*, Marcel Dekker, Inc., 1972.