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join

Canonical name	Join
Date of creation	2013-03-22 12:27:40
Last modified on	2013-03-22 12:27:40
Owner	yark (2760)
Last modified by	yark (2760)
Numerical id	11
Author	yark (2760)
Entry type	Definition
Classification	msc 06A12
Synonym	or operator
Related topic	Meet
Related topic	Semilattice
Defines	join-semilattice
Defines	join semilattice
Defines	upper semilattice

Certain posets X have a binary operation *join* denoted by $\vee$, such that $x \vee y$ is the least upper bound of x and y. Such posets are called *join-semilattices*, or $\vee$-*semilattices*, or *upper semilattices*.

If j and j' are both joins of x and y, then $j \leq j'$ and $j' \leq j$, and so $j = j'$; thus a join, if it exists, is unique. The join is also known as the *or operator*.