



distributive lattice

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A <http://planetmath.org/Lattice> is said to be *distributive* if it satisfies either (and therefore both) of the <http://planetmath.org/Distributive> laws:

- $x \wedge (y \vee z) = (x \wedge y) \vee (x \wedge z)$
- $x \vee (y \wedge z) = (x \vee y) \wedge (x \vee z)$

Every distributive lattice is <http://planetmath.org/ModularLattice>.

Examples of distributive lattices include <http://planetmath.org/BooleanLattice> Boolean lattices, totally ordered sets, and the <http://planetmath.org/LatticeOfSubgroup> lattices of locally cyclic groups.