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Propositional Connectives

Connective	English equivalent	Name
\neg	not	Negation
\wedge	and	Conjunction
\vee	or	Disjunction
\Rightarrow	implies	Implication

P	Q	$\neg P$	$P \wedge Q$	$P \vee Q$	$P \Rightarrow Q$
T	T	F	T	T	T
T	F	F	F	T	F
F	T	T	F	T	T
F	F	T	F	F	T

Morgan's laws

$$\neg(P \wedge Q) = \neg P \vee \neg Q$$

$$\neg(P \vee Q) = \neg P \wedge \neg Q$$

P	Q	$P \Rightarrow Q$	$\neg P \vee Q$	$\neg Q \Rightarrow \neg P$	$P \wedge \neg Q$
T	T	T	T	T	F
T	F	F	F	F	T
F	T	T	T	T	F
F	F	T	T	T	F