



Math for the people, by the people.

## DNF

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A propositional formula is a DNF formula, meaning Disjunctive Normal Form, if it is a disjunction of conjunctions of literals (a literal is a propositional variable or its negation). Hence, a DNF is a formula of the form:  $K_1 \vee K_2 \vee \dots \vee K_n$ , where each  $K_i$  is of the form  $l_{i1} \wedge l_{i2} \wedge \dots \wedge l_{im}$  for literals  $l_{ij}$  and some  $m$  which can vary for each  $K_i$ .

Example:  $(x \wedge y \wedge \neg z) \vee (y \wedge \neg w \wedge \neg u) \vee (x \wedge v)$ .