

Definition

A **tautology** is a proposition that is always true.

A **contradiction** is a proposition that is always false.

- $P \vee \neg P$ is a tautology;
- $Q \wedge \neg Q$ is a contradiction;
- $((P \vee Q) \wedge \neg P) \wedge \neg Q$ is a tautology (see video short working this out!).