### Definition: Contradiction

A propositional expression that is always false, regardless of the assignment of the variables it contains, is called contradiction.

#### Example: Contradiction

Let F := falseA . Then F is a contradiction, because A ∧ ¬AF is always false.

Let be a propositional expression. Then is a contradiction, as can be illustrated by the following truth table:

Let A be a propositional expression. Then A ∧ 0 is a contradiction, as can be illustrated by the following truth table: