

function TT-ENTAILS?(KB, α) **returns** true or false

inputs: KB , the knowledge base, a sentence in propositional logic
 α , the query, a sentence in propositional logic

$symbols \leftarrow$ a list of the proposition symbols in KB and α

return TT-CHECK-ALL($KB, \alpha, symbols, \{ \}$)

function TT-CHECK-ALL($KB, \alpha, symbols, model$) **returns** true or false

if EMPTY?($symbols$) **then**

if PL-TRUE?($KB, model$) **then return** PL-TRUE?($\alpha, model$)

else return true // when KB is false, always return true

else

$P \leftarrow$ FIRST($symbols$)

$rest \leftarrow$ REST($symbols$)

return (TT-CHECK-ALL($KB, \alpha, rest, model \cup \{P = true\}$)

and

TT-CHECK-ALL($KB, \alpha, rest, model \cup \{P = false\}$)