

Week 04 Exercises

Qs. 1

Given a state

$$s = \begin{array}{c|cccc} \text{var} & p & q & r & s \\ \hline \text{val} & T & T & T & F \end{array}$$

evaluate the sentences

- $\neg((r \vee \neg q) \wedge \neg s) \vee (\neg(\neg p \wedge q) \wedge s)$
- $p \wedge (\neg s \vee q) \wedge \neg(\neg r \wedge \neg p)$

in the state, s .

Qs. 2

Determine the Truth Tables for the following sentences:

- $\neg(p \wedge \neg(\neg q \vee r))$
- $(p \wedge q) \vee (\neg p \wedge r)$