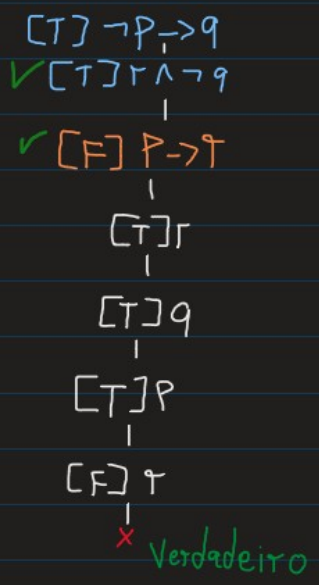
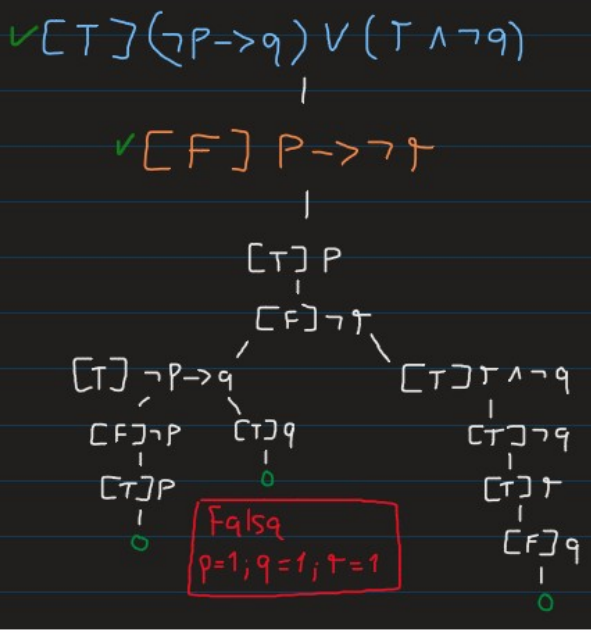
Gabarito Lista Tableaux

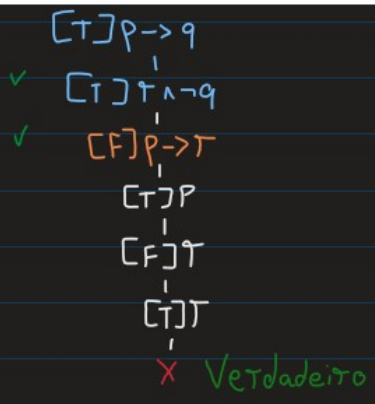
(a) $\neg p \to q, r \wedge \neg q \vdash p \to r$



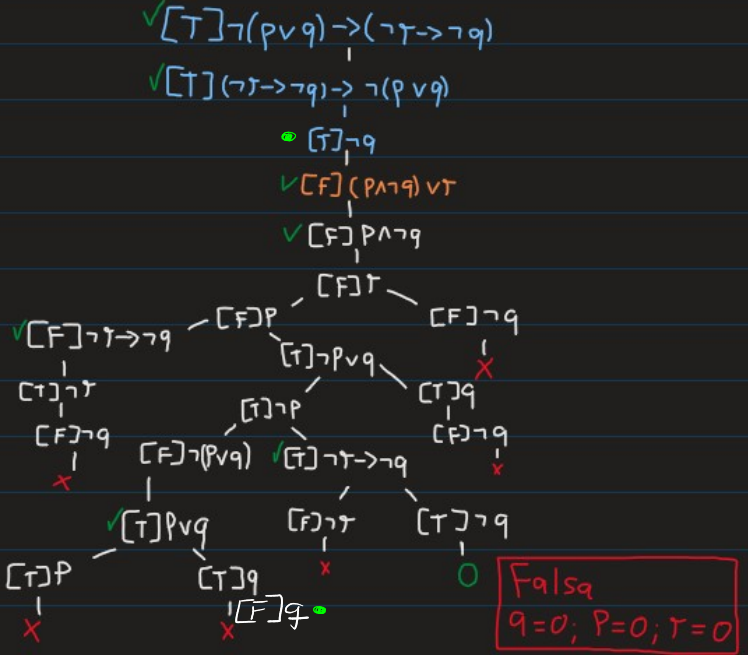
(b) $(\neg p \to q) \vee (r \wedge \neg q) \vdash p \to \neg r$



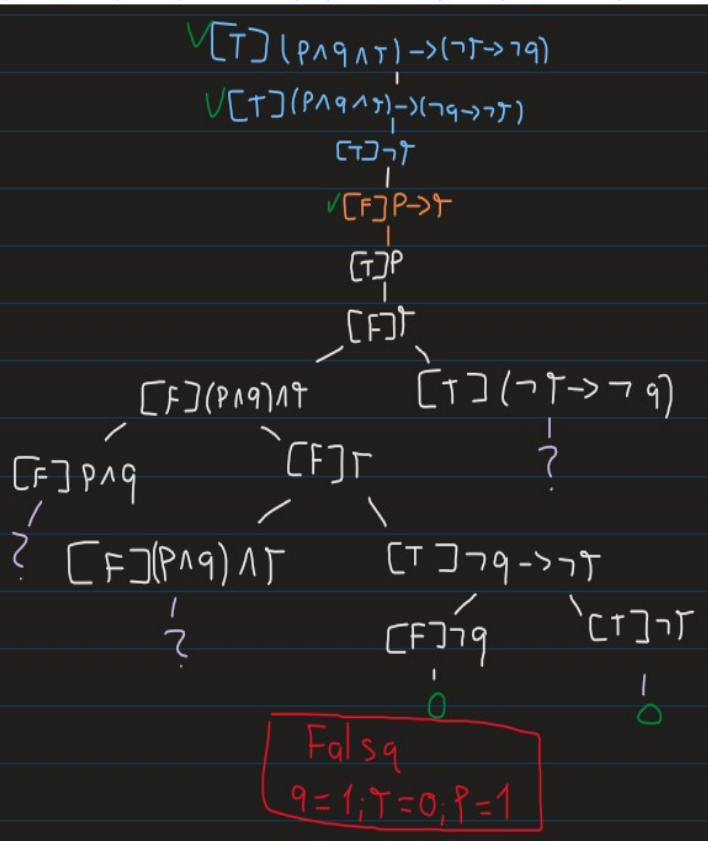
(c) $p \to q, r \wedge \neg q \vdash p \to r$



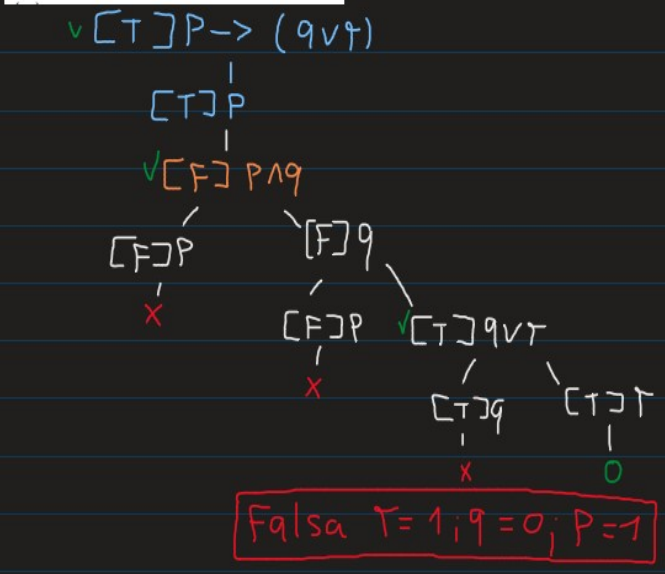
(d) $\neg(p \vee q) \to (\neg r \to \neg q), (\neg r \to \neg q) \to \neg(p \vee q), \neg q \vdash (p \wedge \neg q) \vee r$



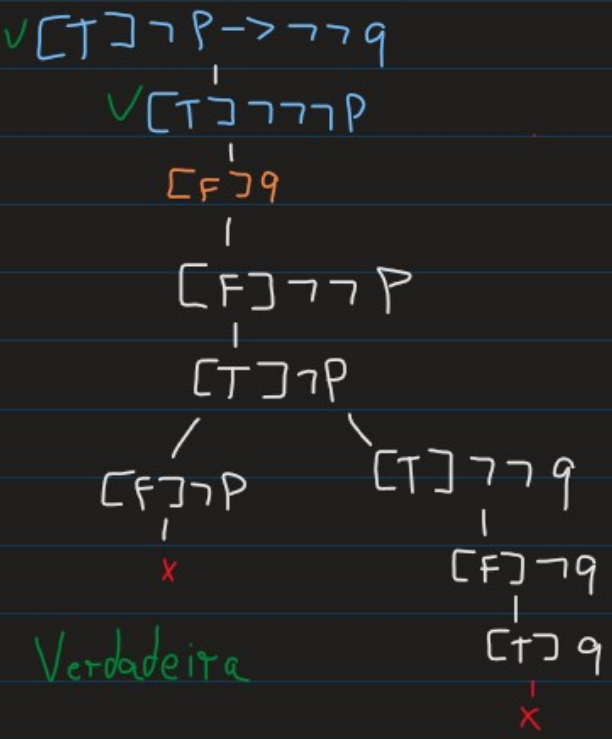
(e) $(p \wedge q \wedge r) \rightarrow (\neg r \rightarrow \neg q), (p \wedge q \wedge r) \rightarrow (\neg q \rightarrow \neg r), \neg r \vdash p \rightarrow r$



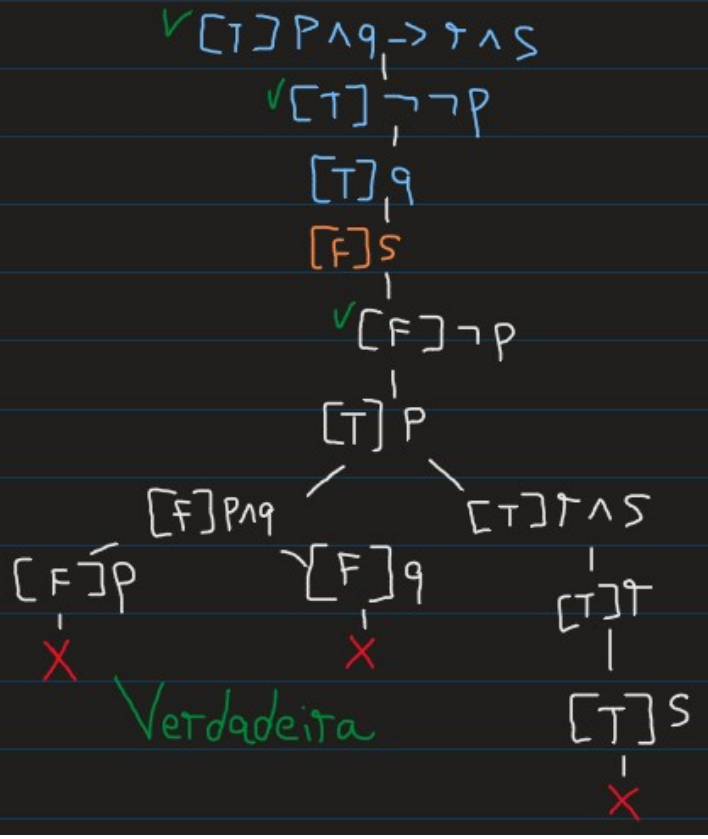
(f) $p \rightarrow (q \vee r), p \vdash p \wedge q$



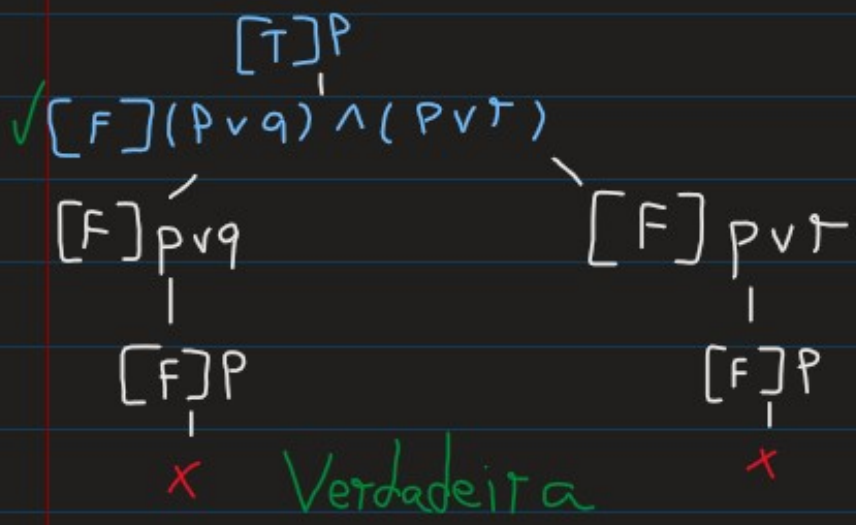
(g) $\neg p \rightarrow \neg\neg q, \neg\neg\neg p \vdash q$



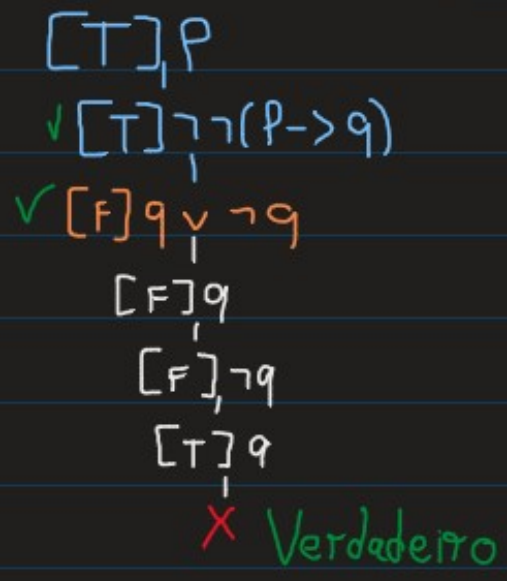
(h) $(p \wedge q) \rightarrow (r \wedge s), \neg\neg p, q \vdash s$



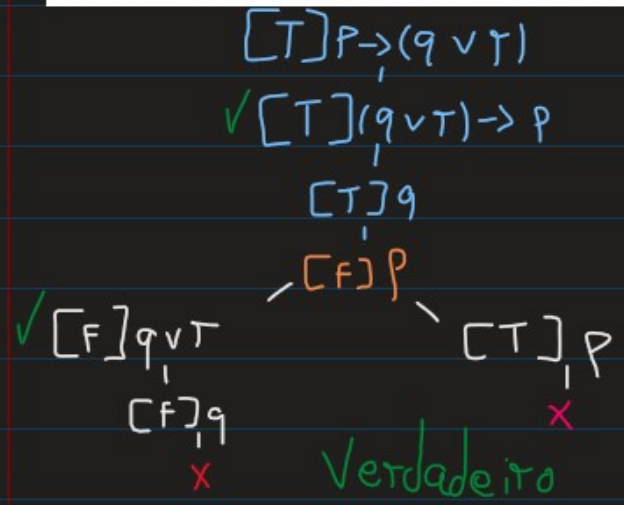
(i) $p \vdash (p \vee q) \wedge (p \vee r)$



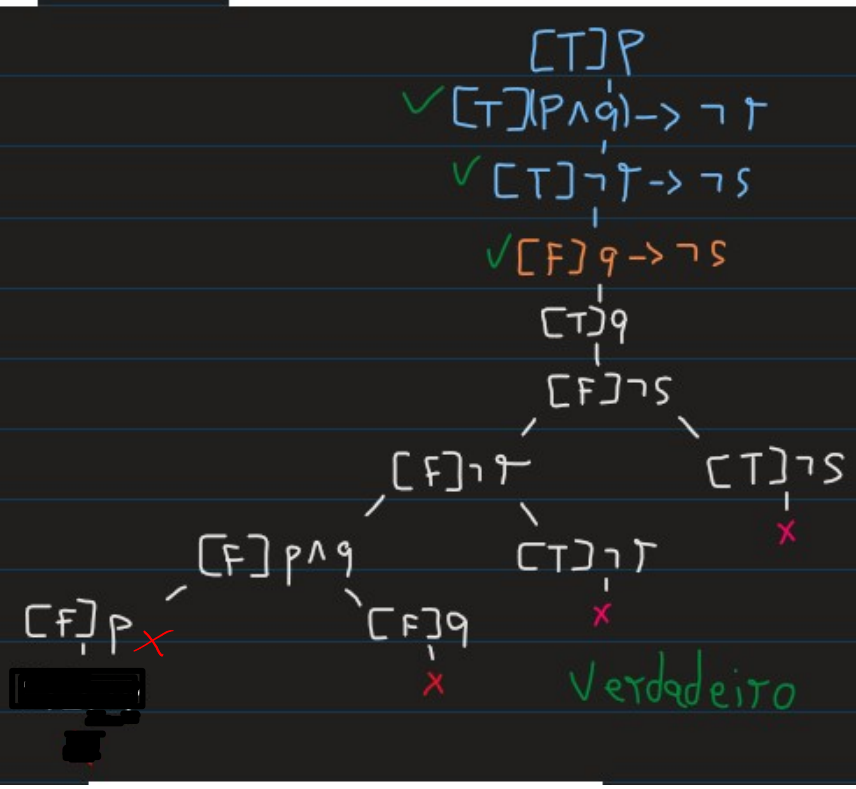
(j) $p, \neg\neg(p \to q) \vdash q \vee \neg q$



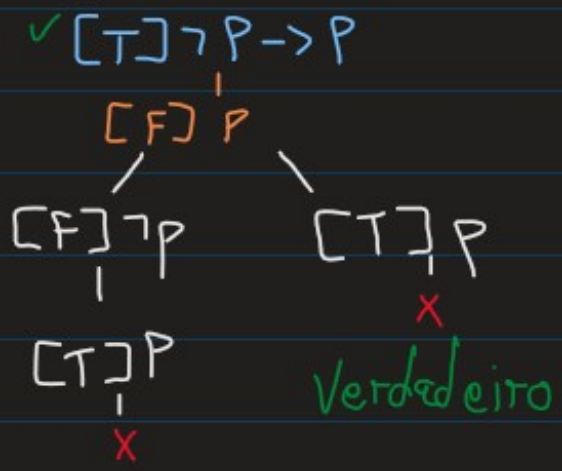
(k) $p \to (q \vee r), (q \vee r) \to p, q \vdash p$



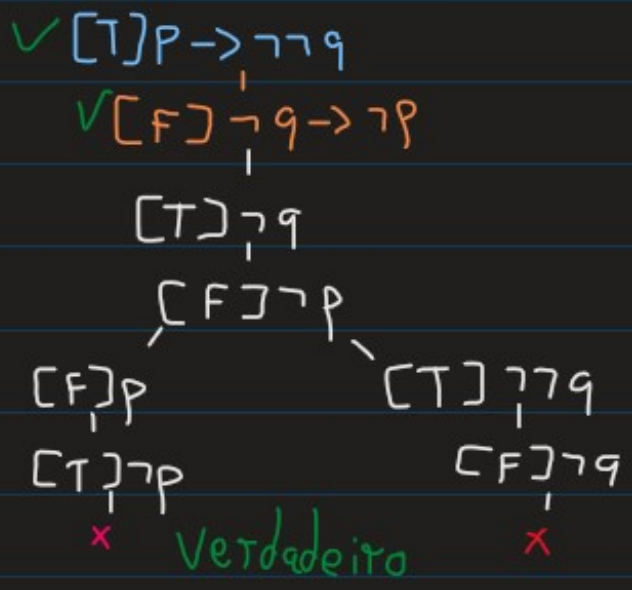
(l) $p, (p \wedge q) \to \neg r, \neg r \to \neg s \vdash q \to \neg s$



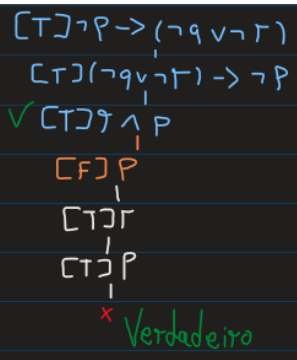
(m) $\neg p \to p \vdash p$



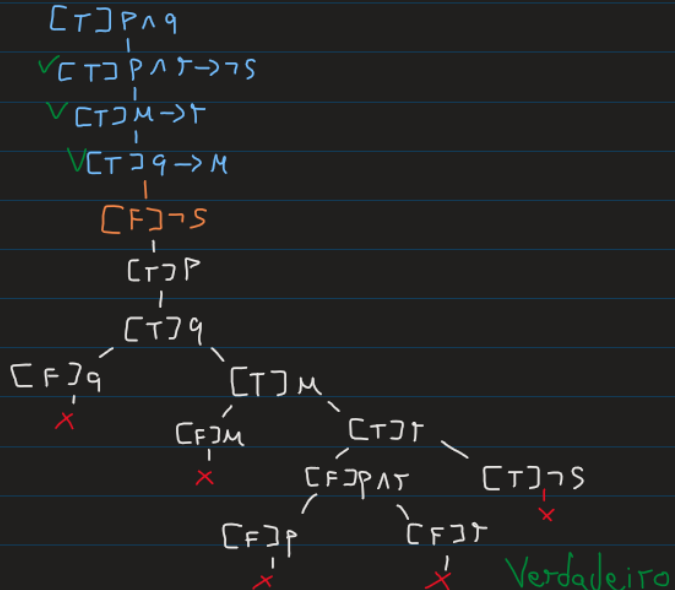
(n) $p \to \neg\neg q \vdash \neg q \to \neg p$



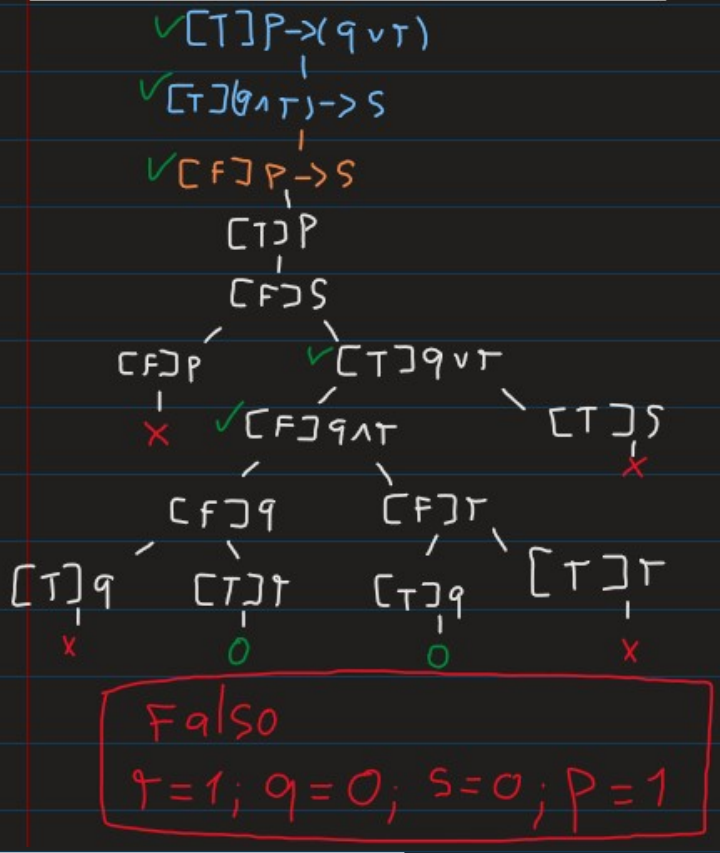
(o) $\neg p \to (\neg q \vee \neg r), (\neg q \vee \neg r) \to \neg p, r \wedge p \vdash p$



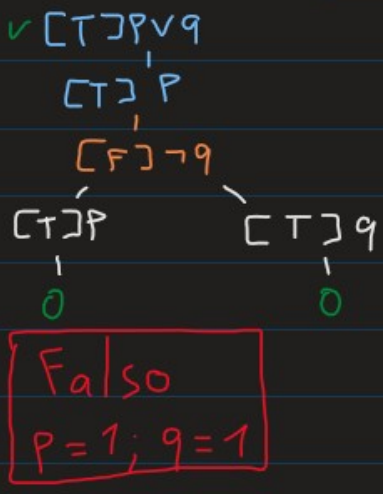
(p) $p \wedge q, p \wedge r \to \neg s, u \to r, q \to u \vdash \neg s$



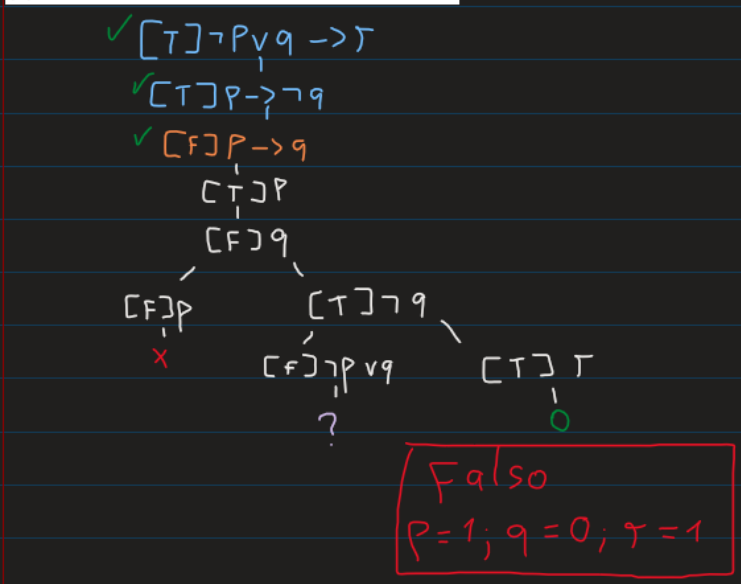
(q) $p \to (q \vee r), (q \wedge r) \to s \vdash p \to s$



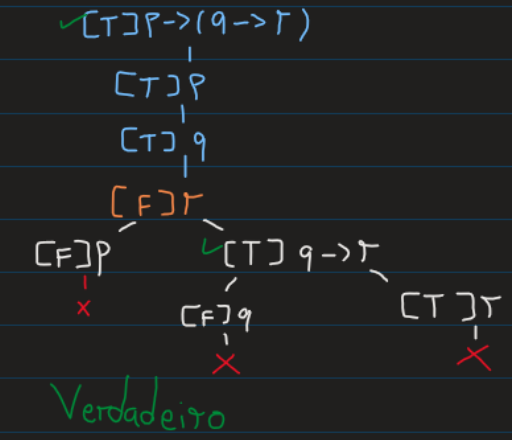
(r) $p \vee q, p \vdash \neg q$



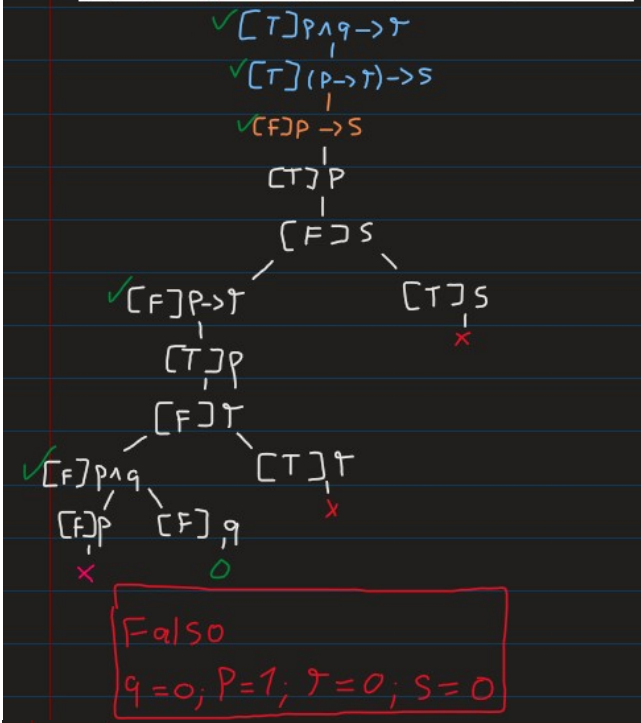
(s) $\neg p \vee q \to r, p \to \neg q \vdash p \to q$



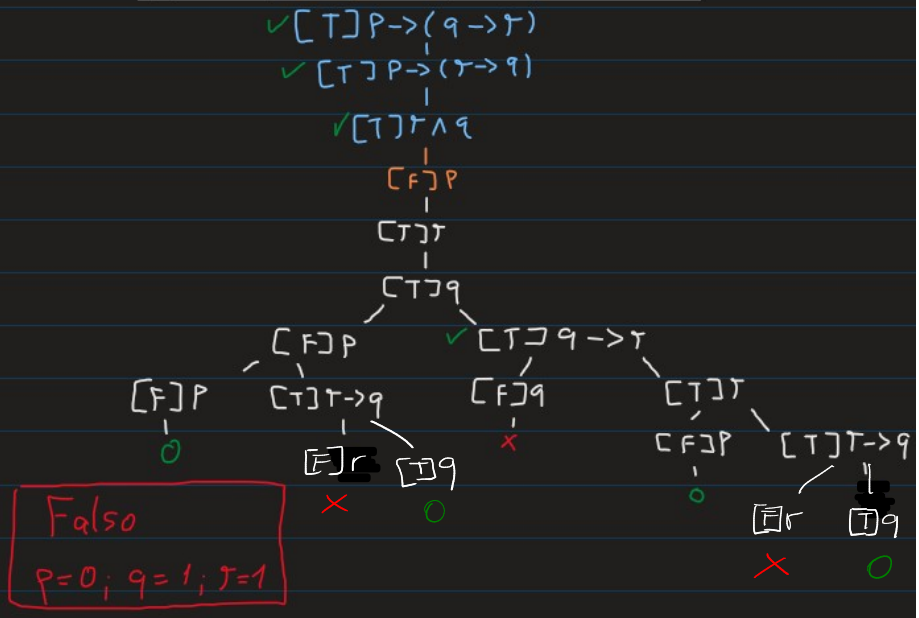
(t) $p \to (q \to r), p, q \vdash r$



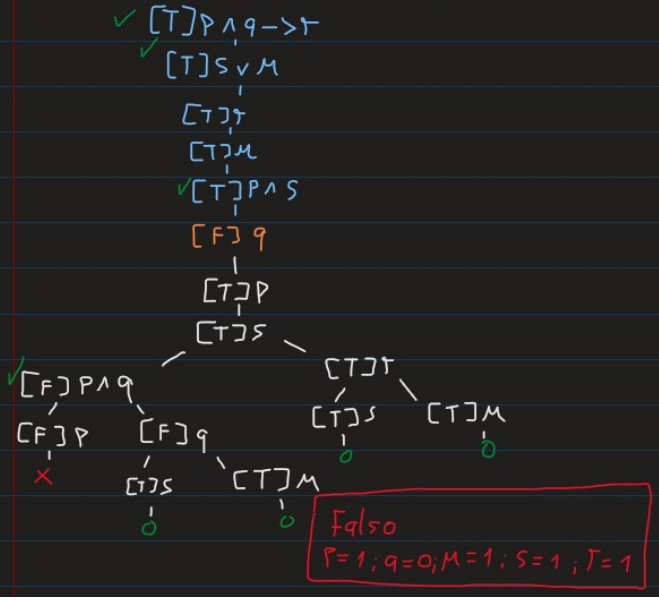
(u) $(p \wedge q) \rightarrow r, (p \rightarrow r) \rightarrow s \vdash p \rightarrow s$



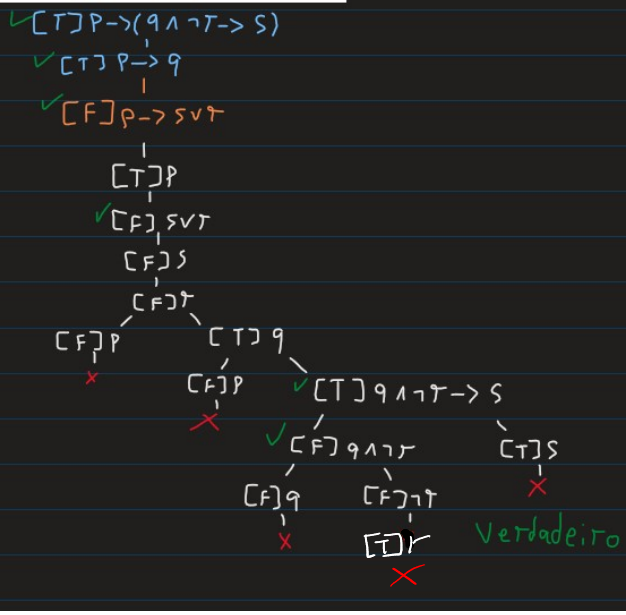
(v) $p \rightarrow (q \rightarrow r), p \rightarrow (r \rightarrow q), r \wedge q \vdash p$



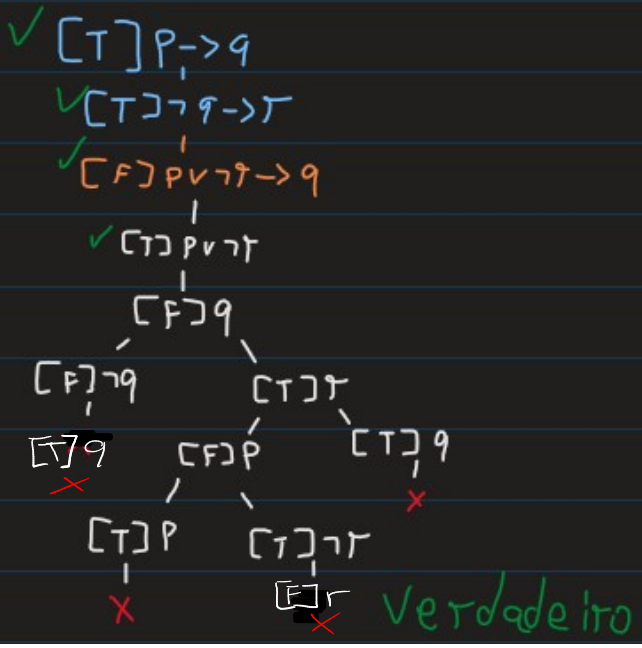
(w) $p \wedge q \rightarrow r, s \vee u, r, u, p \wedge s \vdash q$



(x) $p \rightarrow (q \wedge \neg r \rightarrow s), p \rightarrow q \vdash p \rightarrow s \vee r$



(y) $p \to q, \neg q \to r \vdash p \vee \neg r \to q$



(z) $p \wedge r \to \neg q, \neg p \vdash q \to \neg r$