

Exercícios → passage à langage électronique

↳ (algèbre de Boole)

$$P \quad q \quad v \equiv \begin{cases} a & b & c \\ A & B & C \end{cases}$$

exemplo.

a) $(\neg p \wedge q) \vee v$

$$\bar{A} \cdot B + C$$

$$(\bar{a} \cdot b) + c$$

b) $\neg(p \wedge v) \vee q$

Semântica

$$\boxed{- \mid \cdot \mid + \mid}$$

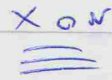
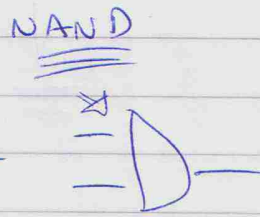
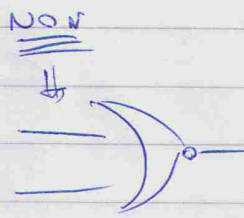
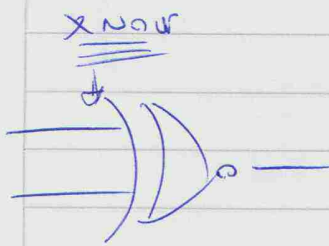
$$\boxed{\neg \mid \wedge \mid \vee \mid}$$

Exemples.

↳ $\overline{a+b} \neg(p \vee q)$

$$\overline{a \cdot b} \neg(p \wedge q)$$

$$\bar{a} \cdot \bar{b} \neg p \cdot \neg q$$



$\neg(P \vee Q)$
 $A \oplus B$

$\neg(P \wedge Q)$
 $A + B$

$\neg(P \wedge Q)$
 $A \cdot B$

$$\begin{array}{l} 1 \oplus 1 = 0 \\ 1 \oplus 0 = 1 \\ 0 \oplus 1 = 1 \\ 0 \oplus 0 = 0 \end{array}$$

$$\begin{array}{l} 1 + 1 = 0 \\ 1 + 0 = 1 \\ 0 + 1 = 1 \\ 0 + 0 = 0 \end{array}$$

$$\begin{array}{l} 1 \cdot 1 = 1 \\ 1 \cdot 0 = 0 \\ 0 \cdot 1 = 0 \\ 0 \cdot 0 = 0 \end{array}$$

$P \vee Q$

$A \oplus B$

$$\begin{array}{l} 1 \oplus 1 = 0 \\ 1 \oplus 0 = 1 \\ 0 \oplus 1 = 1 \\ 0 \oplus 0 = 0 \end{array}$$