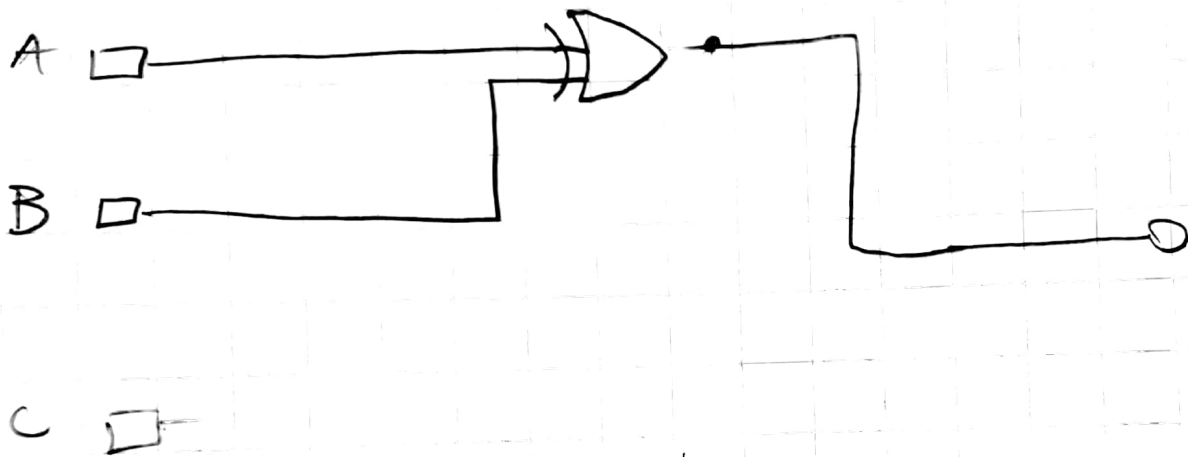


Problema 1



Problema 2:

Simplificar Expresiones booleanas. (nombrélas en cada paso.)

$$a) \bar{A}\bar{B}C + \overline{(A+B+C)} + \bar{A}\bar{B}\bar{C}D$$

$$\bar{A}\bar{B}C + \bar{A}\bar{B}\bar{C}D + \overline{(A+B+C)} \Rightarrow \bar{A}\bar{B} + (\bar{A}\bar{B} \cdot \bar{C})$$

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

R/ ley de absorción y leyes de Morgan

$$b) \bar{A}B + \bar{A}B\bar{C} + \bar{A}BCD + \bar{A}B\bar{C}DE$$

$$\Rightarrow \bar{A}B$$

R/ ley de absorción $A + A \cdot B = A$

$$c) BD + B(D+E) + \bar{D}(D+C+\bar{B}\bar{E})$$

$$BD + BD + B\bar{E} + \bar{D}(D+C+B+E)$$

$$BD + B\bar{E} + \bar{D}\bar{D} + \bar{D}C + \bar{D}B + \bar{D}E$$

$$BD + \bar{B}\bar{D} + B\bar{E} + DC + \bar{D}E$$

$$1 + B\bar{E} + \bar{D}C + \bar{D}E$$

R/ ley distributiva, ley Morgan
ley absorción, ley complemento.

Problema 2

$$d) \quad A\bar{B} + A(\bar{D} + C) + \overline{\bar{D}(A+B)}$$

$$\rightarrow A\bar{B} + A\bar{D} + AC + (\bar{\bar{D}} + \overline{(A+B)})$$

$$\Rightarrow A\bar{B} + A\bar{D} + AC + D + \bar{A}\bar{B}$$

$$A\bar{B} + \bar{A}\bar{B} + A\bar{D} + D + AC$$

$$\rightarrow A\bar{B} + \bar{A}\bar{B} + \bar{D} + AC$$

V/. leyes de Morgan, ley de involución
ley de absorción

Problema 3

Graficar SALIDA segun diagrama de tren de impulso.

