



Lista de Exercícios – GABARITO

Circuitos e expressões lógicas

1) Obtenha as expressões lógicas dos circuitos do exercício (3) da lista “Circuitos Lógicos”.

a) $S = A \cdot B + C$

b) $S = \overline{A \cdot B + A \cdot \overline{B}}$

c) $S = \overline{A \cdot \overline{A \cdot B} \cdot B + C}$

d) $S = (A \cdot \overline{A \cdot B}) \cdot (B \cdot \overline{A \cdot B})$

e) $S = A \cdot B + \overline{C \cdot D} + \overline{C}$

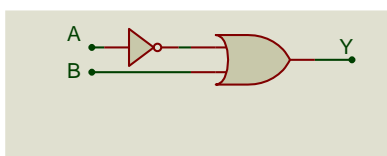
f) $S = \overline{A \cdot B \cdot \overline{B \cdot C} \cdot (B + D)}$

g) $S_A = ((A \cdot B) \odot A) + ((A \cdot B) \oplus B)), S_B = ((A \cdot B) \oplus B)) + C$

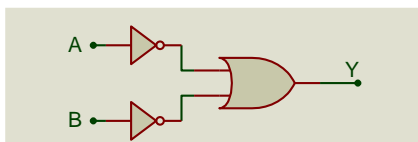
h) $S = (A \odot B) \cdot ((A \odot B) + (C \oplus D))$

i) $S = ((A \odot B) \oplus A) + ((A \odot B) \oplus B)$

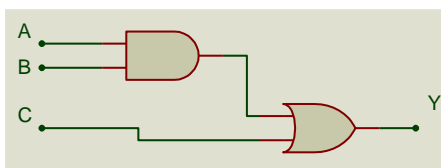
2) Obtenha os circuitos lógicos das expressões do exercício (1) da lista “Expressões lógicas”.



a)

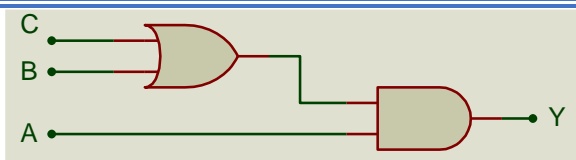


b)

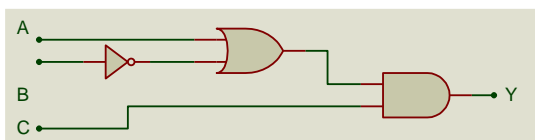


c)

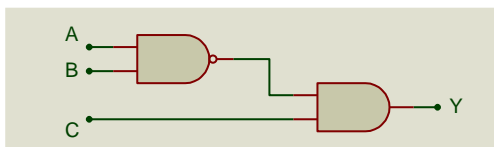
d)



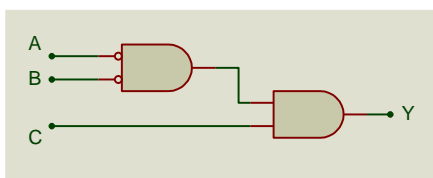
e)



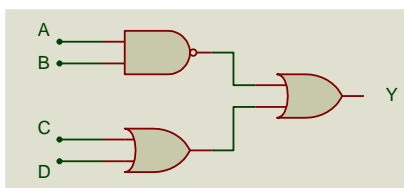
f)



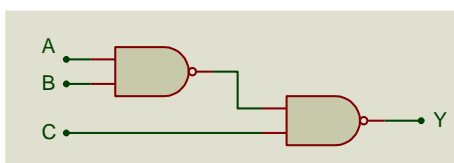
g)



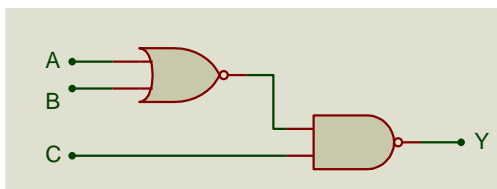
h)



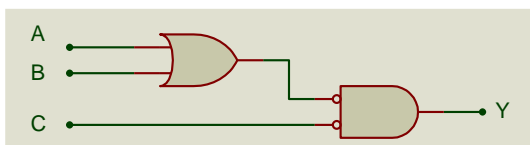
i)



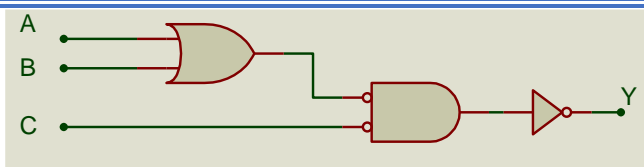
j)



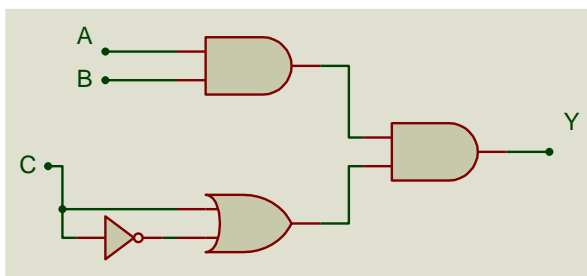
k)



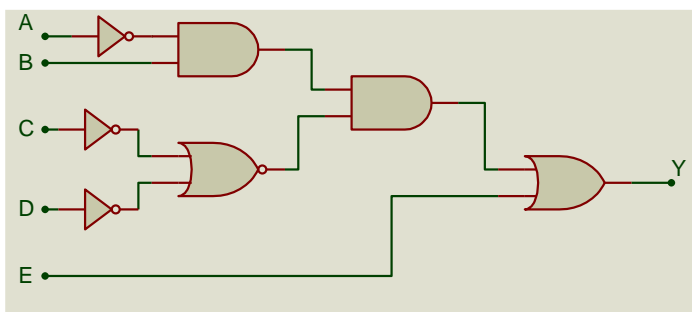
l)



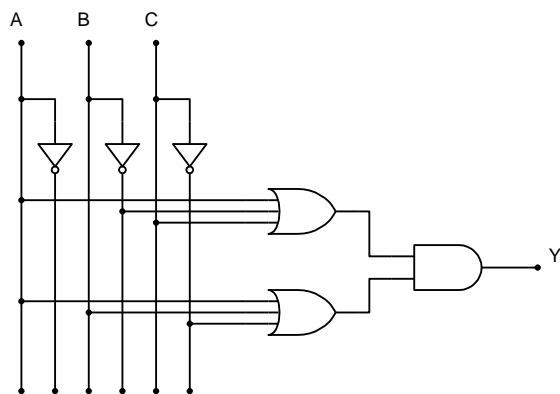
m)



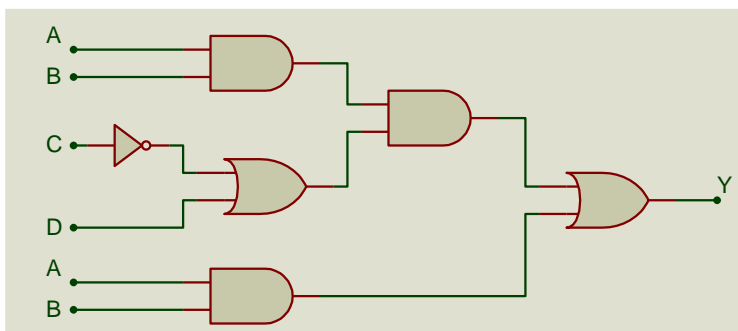
n)



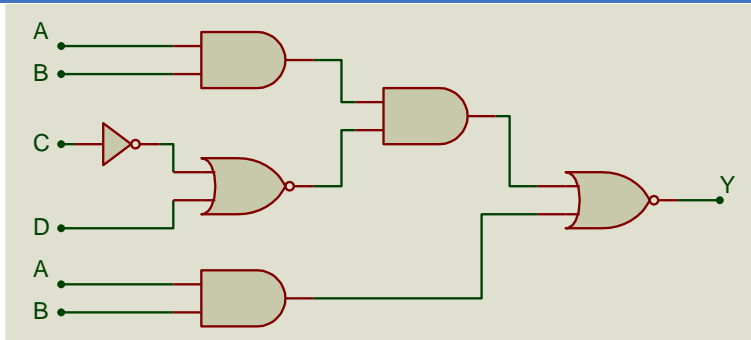
o)



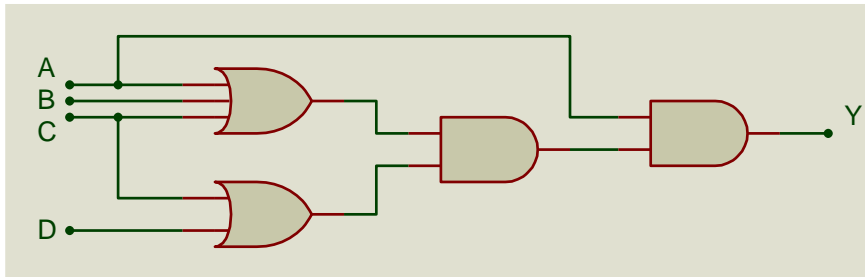
p)



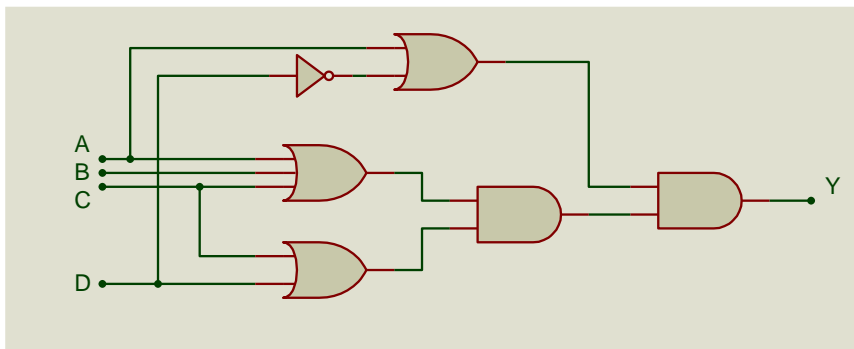
q)



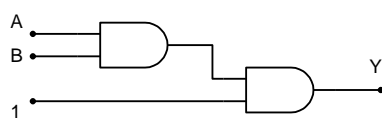
r)



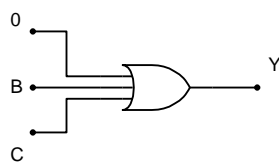
s)

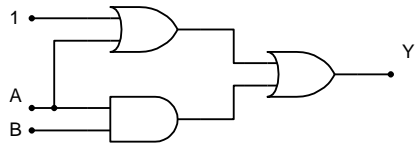


t)

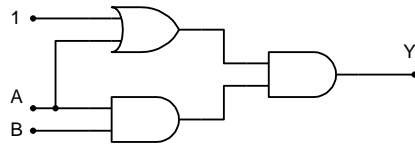


u)

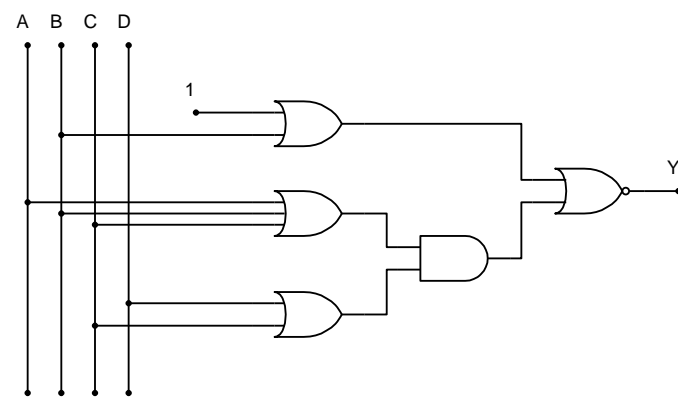




v)



w)



x)