



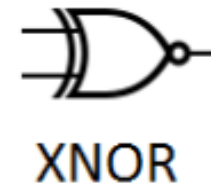
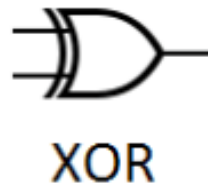
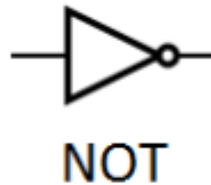
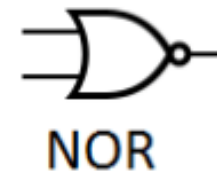
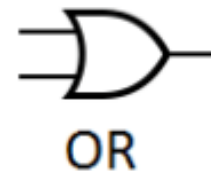
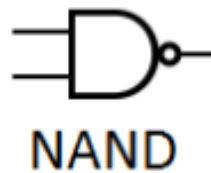
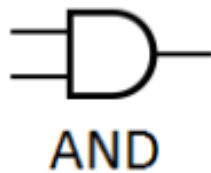
Arquitetura de Computadores

Prof. Debora Canne





Portas Lógicas



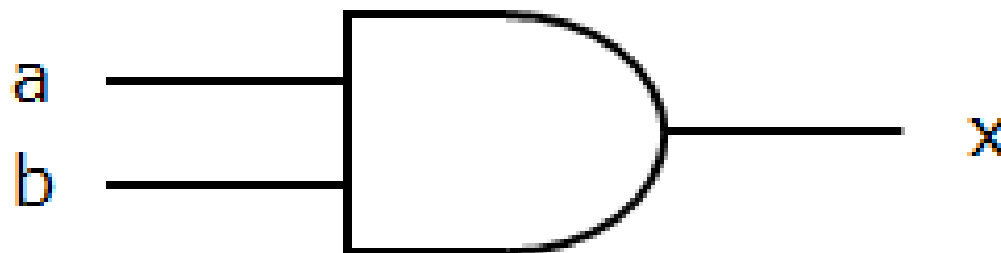
Portas Lógicas

Definição: São as bases dos circuitos lógicos e têm por finalidade realizar determinada função. Cada porta pode ter várias linhas de entrada, mas somente uma linha de saída.

Portas Lógicas

Porta lógica E (\bullet):

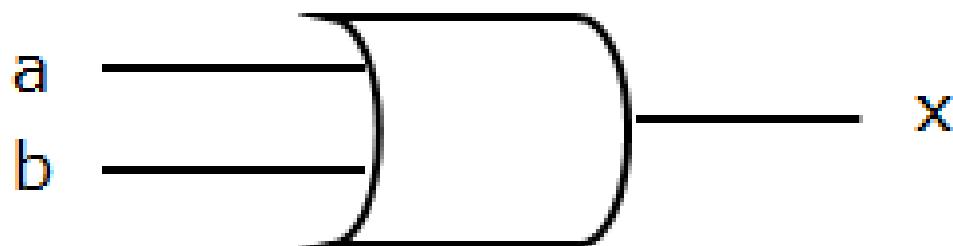
$$x = a \bullet b$$



Portas Lógicas

Porta lógica OU (+):

$$x = a + b$$



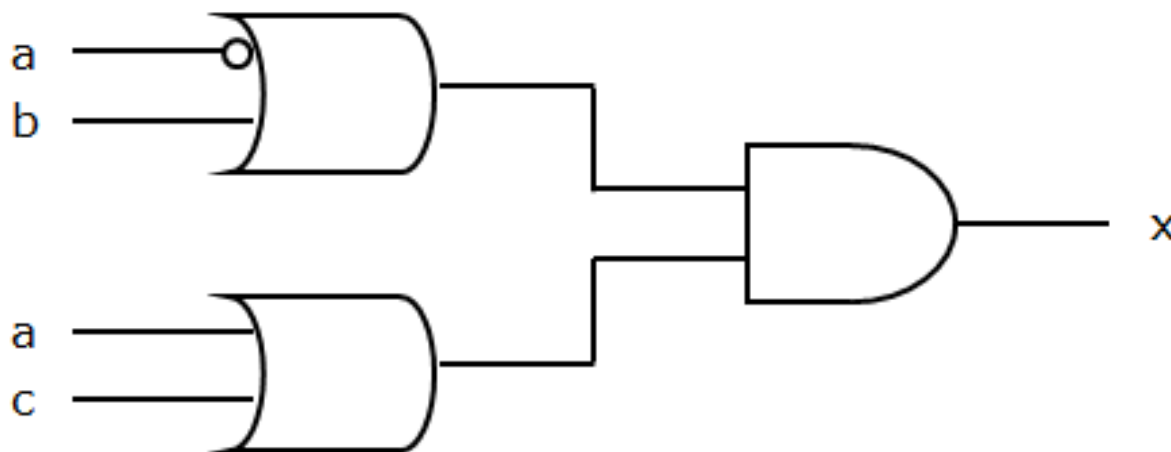
Portas Lógicas

Porta lógica NÃO (')

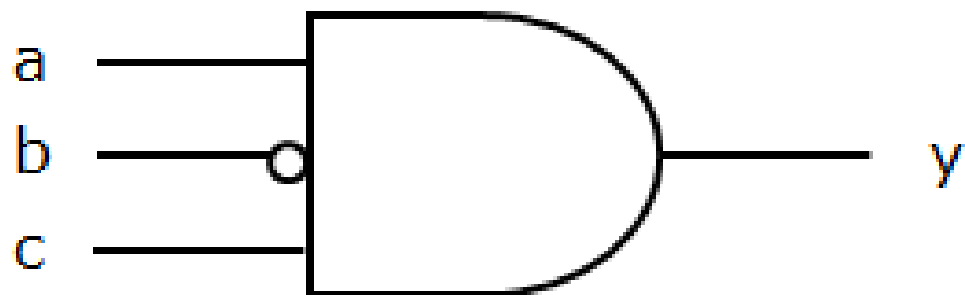
$$x = a' + b'$$



Dar as funções correspondentes aos circuitos lógicos abaixo:

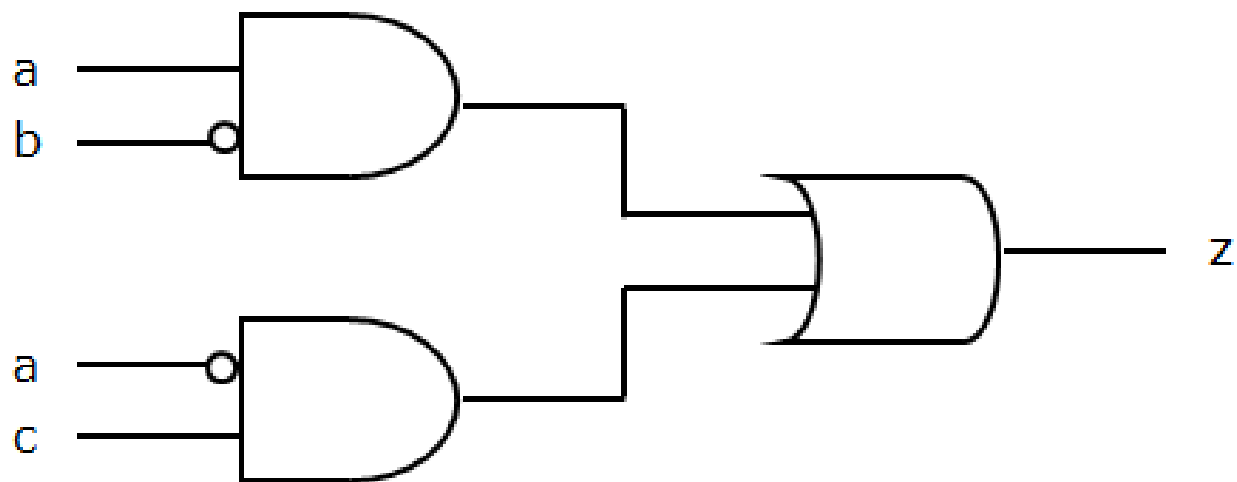


$$x = (a' + b) \bullet (a + c)$$



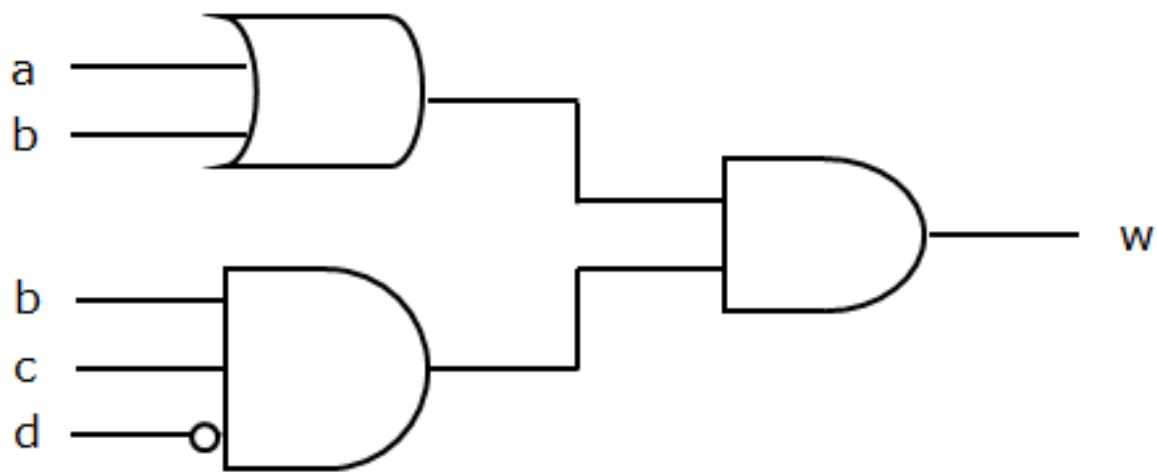
$$y = a \bullet b' \bullet c$$





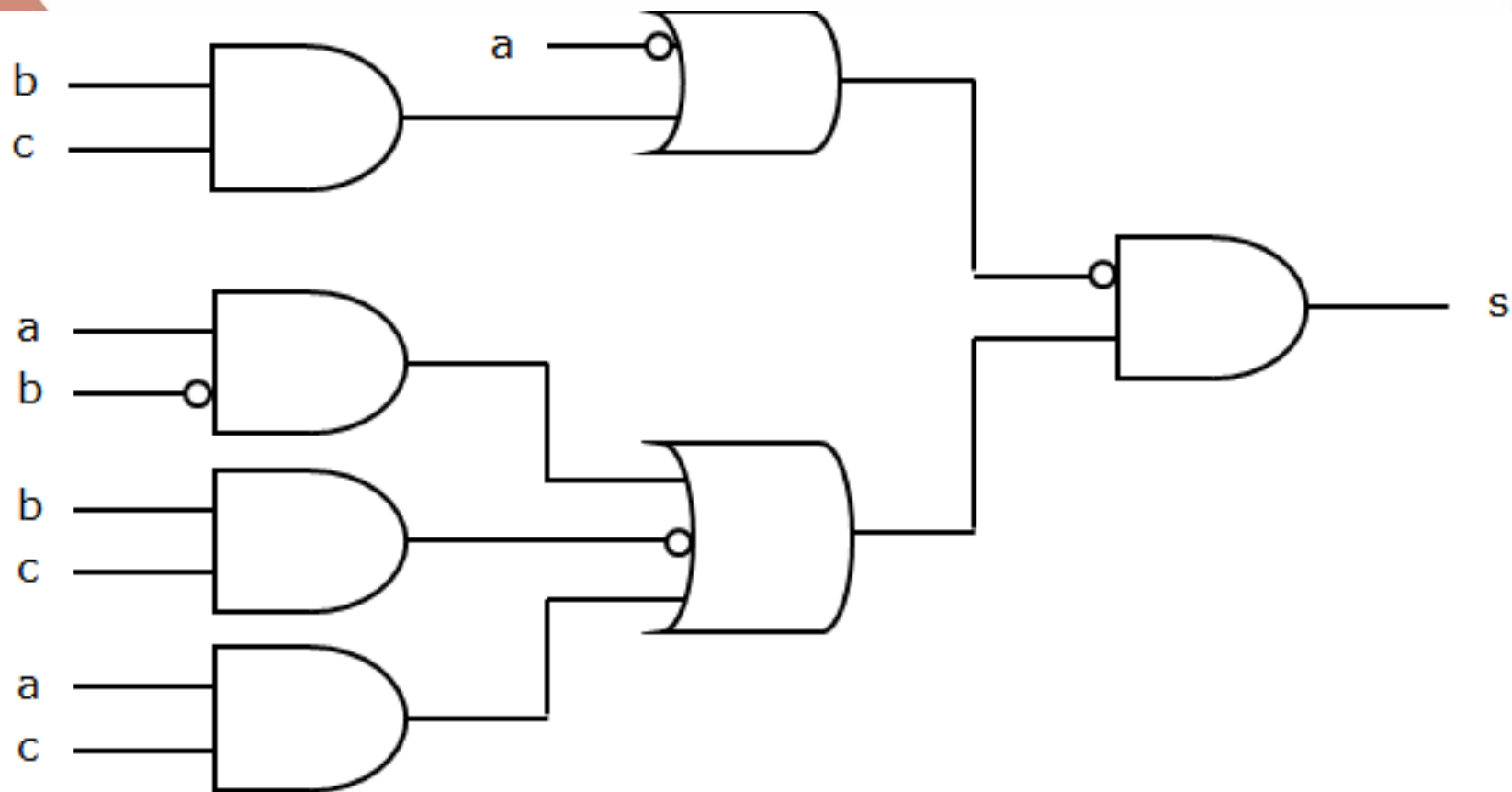
$$z = (a \bullet b') + (a' \bullet c)$$





$$w = (a + b) \bullet (b \bullet c \bullet d')$$





$$s = (a' + (b \bullet c))' \bullet ((a \bullet b') + (b \bullet c)' + (a \bullet c))$$



HORA DE PRATICAR!

