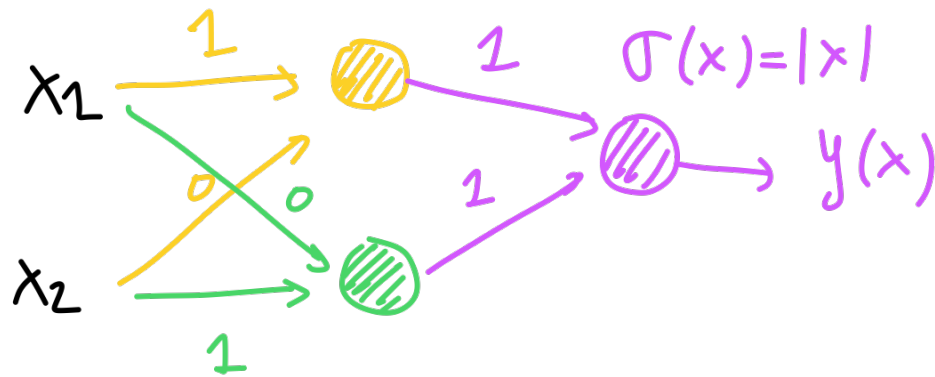


$$\sigma(x) = \begin{cases} 1 & x \geq 0 \\ -1 & x < 0 \end{cases}$$

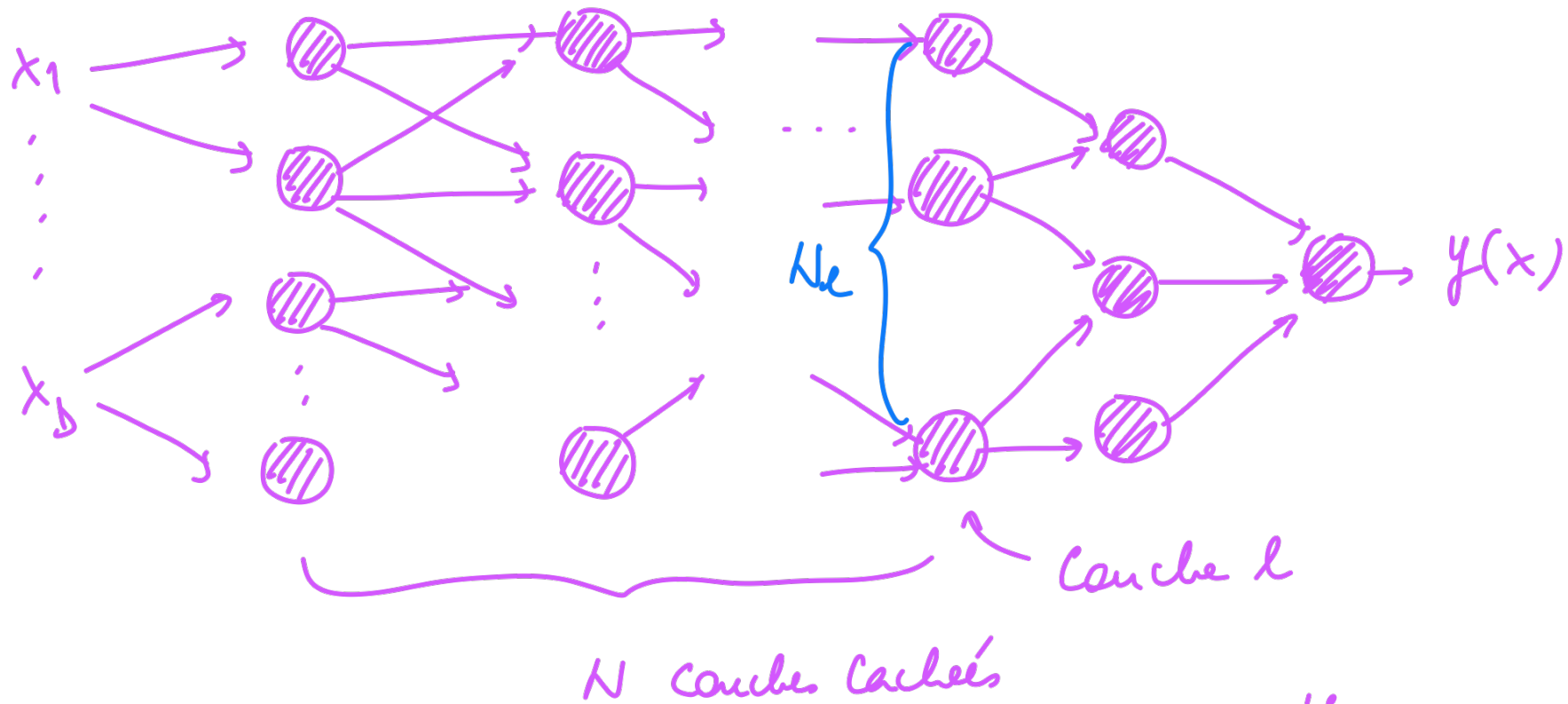
$$\sigma(x_1)$$

$$\sigma(x_2)$$



$$y(\text{blue}) = 2$$

$$y(\text{red}) = 0$$



N_l : nombre de neurones dans la couche l

Sortie du i^{ème} neurone de la couche l

$$z_i^{(l)} = \sigma \left(\sum_{j=1}^{N_{l-1}} w_{ij}^{(l)} z_j^{(l-1)} + w_{i0}^{(l)} \right)$$

$w_{ij}^{(l)}$: j^{ème} coefficient
du i^{ème} neurone de la
couche l

