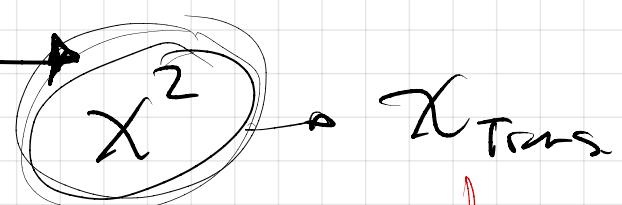
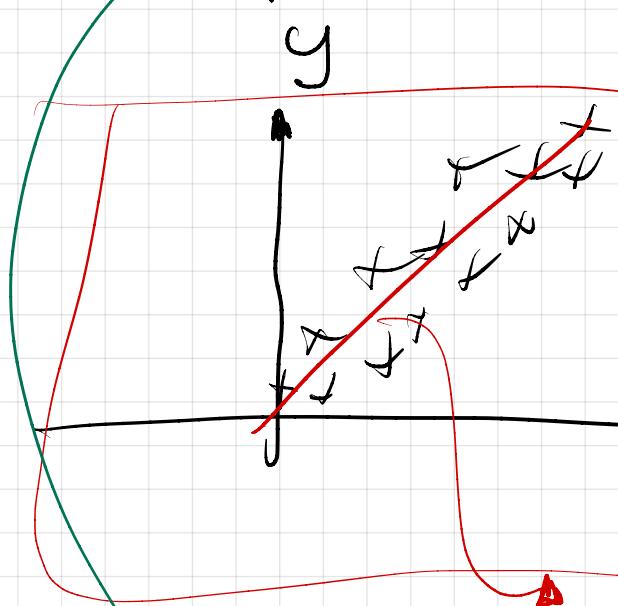
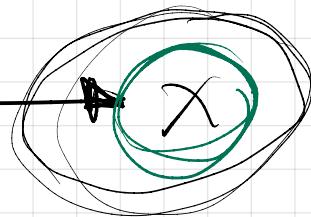


$$y = x^2$$

No linea  
en  $x$



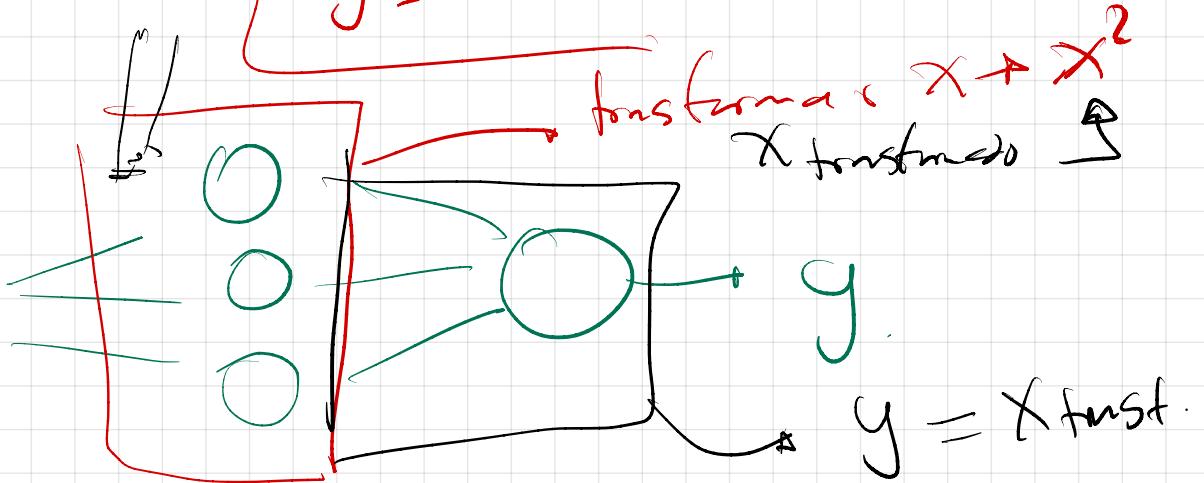
$$y = x_{\text{trans}}$$

$$x_{\text{trans}} = x^2$$

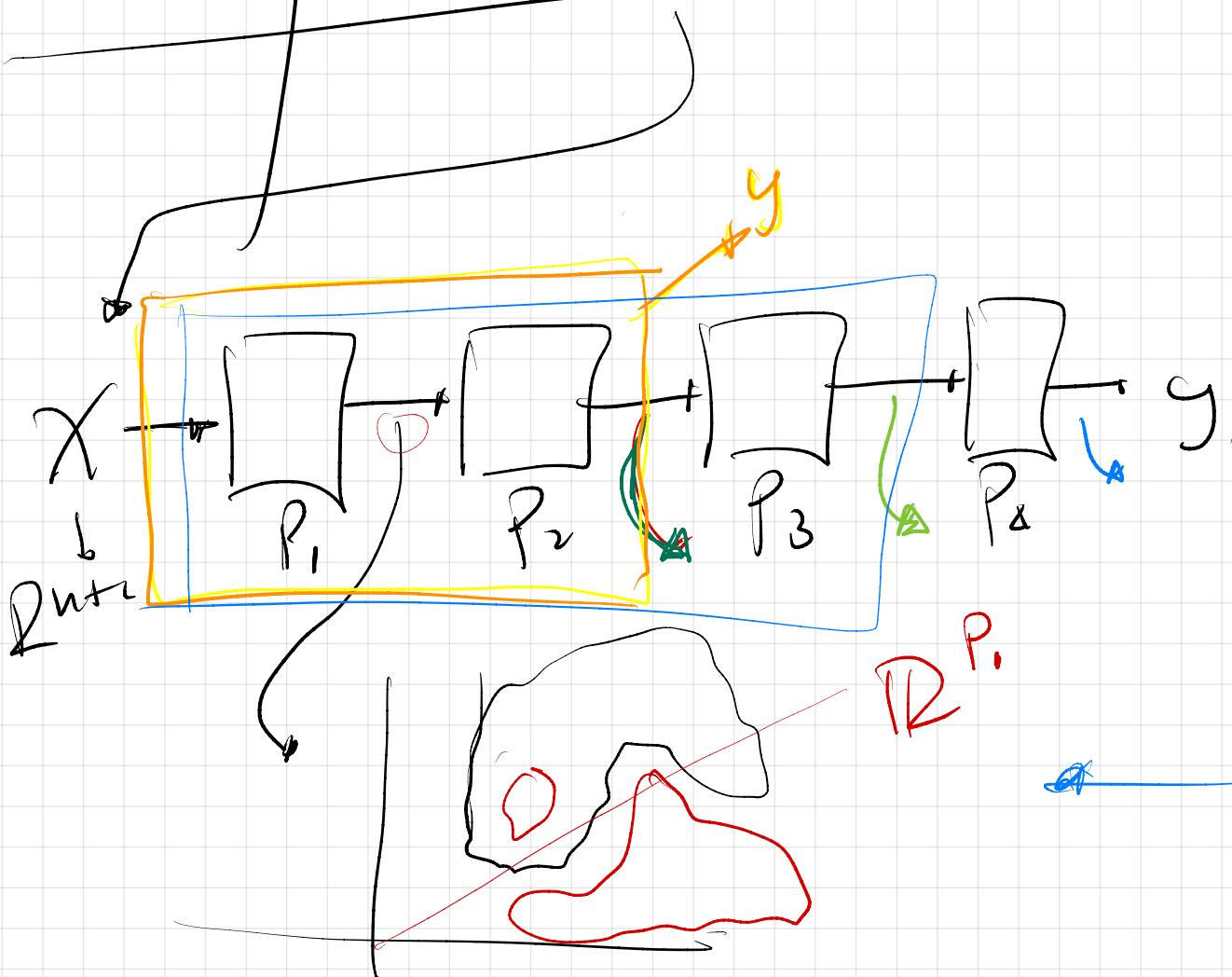
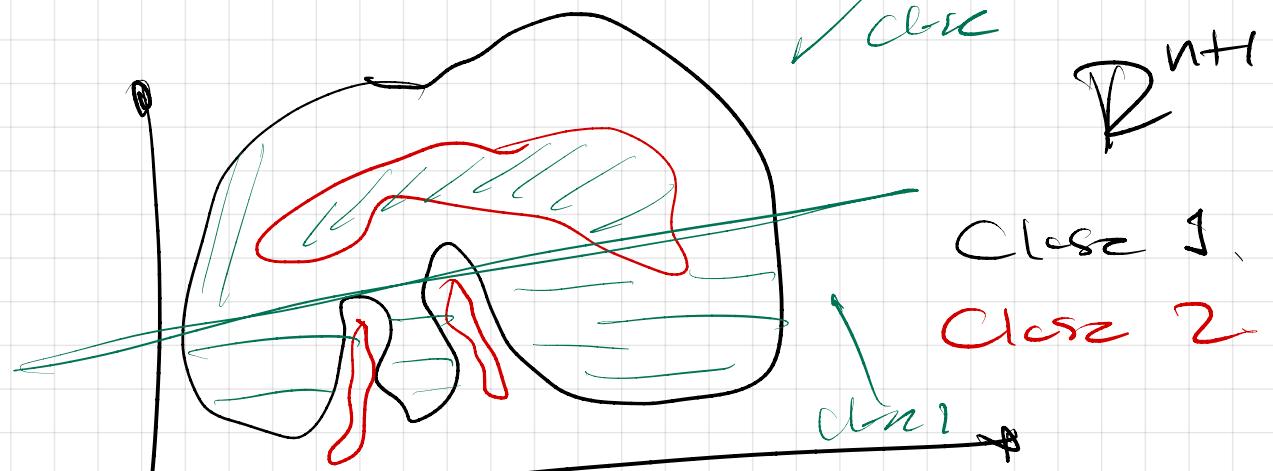
$$y = x^2$$

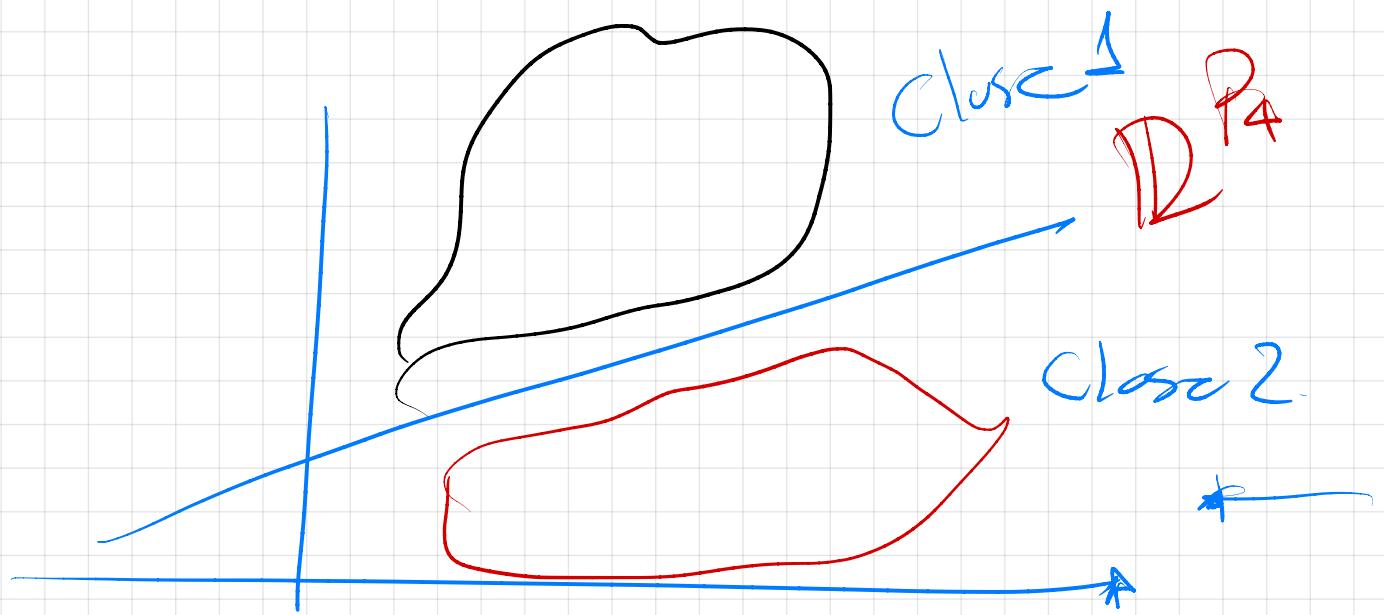
entada

$$x$$



$$y = x_{\text{trans}}$$

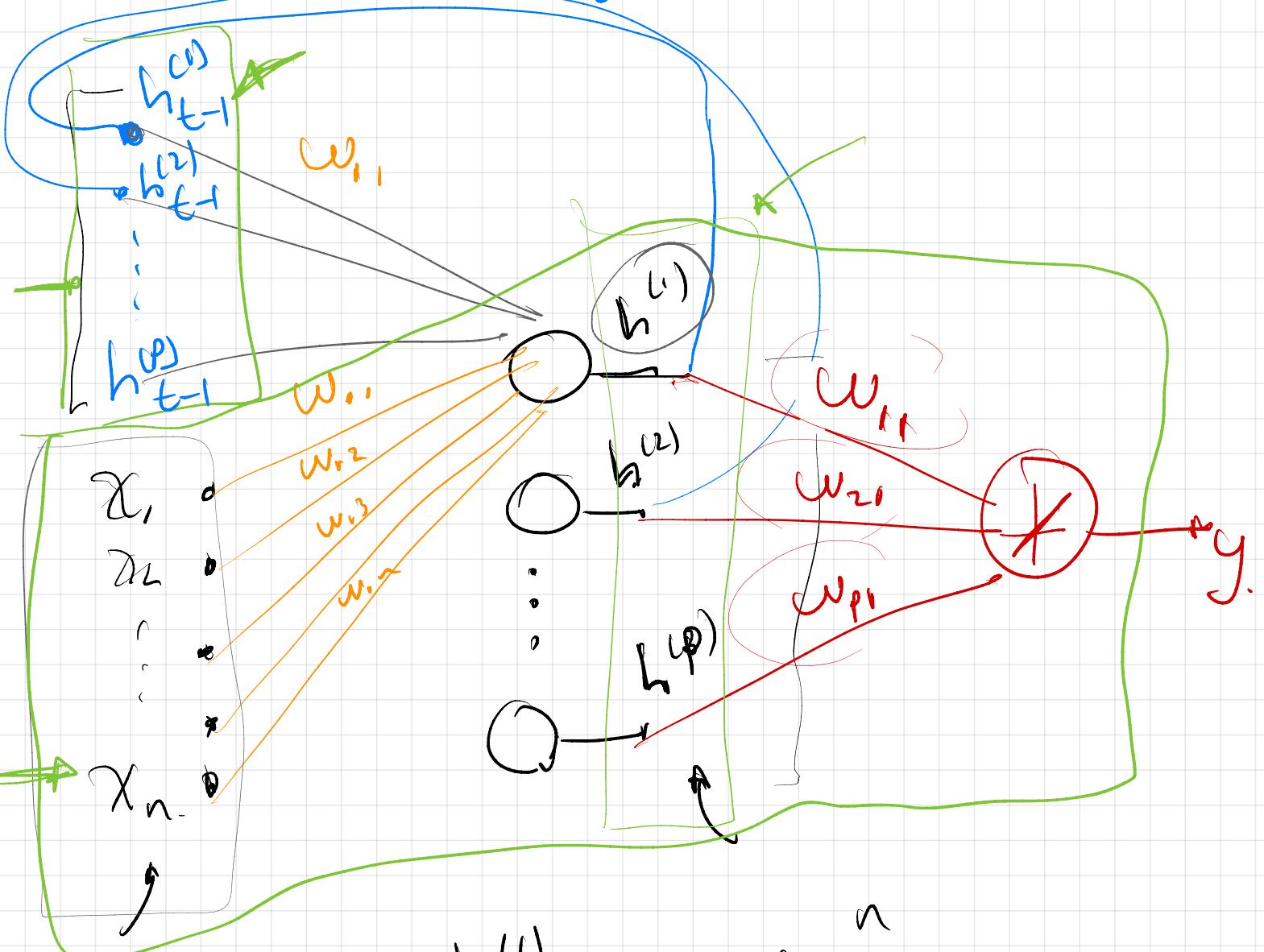




$$h_t = f_w(h_{t-1}, x_t).$$

$$h_t = \tanh(W_u h_{t-1} + W_x x_t)$$

$$y_t = W_y h_t.$$



$$h_t^{(1)} = \tanh \left( \sum_{i=1}^n w_{i,1} x_i + \sum_{j=1}^{L-1} w_{j,1} h_j^{(1)} \right)$$

$$h = \begin{bmatrix} h^{(1)} \\ h^{(2)} \\ \vdots \\ h^{(P)} \end{bmatrix} \quad X = \begin{bmatrix} x^{(1)} \\ \vdots \\ x^{(n)} \end{bmatrix}$$

$$h = \tanh(W_{xh} X + W_{hh} h)$$

$$W_{xh} \in \mathbb{R}^{n \times p}$$

$$W_{hh} \in \mathbb{R}^{p \times p}$$

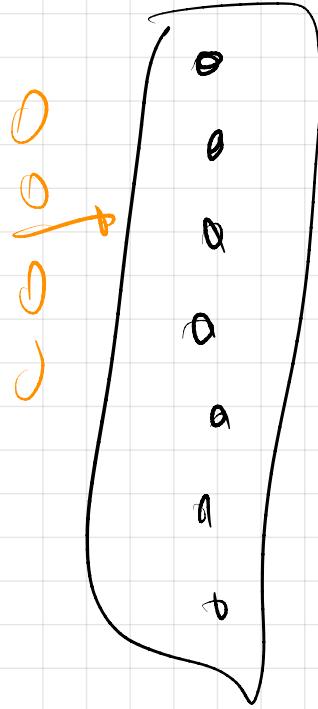
$$y = \sum_{i=1}^p w_{ii} h_t^{(i)}$$

$$y = \underbrace{W_{hg} h_t}_{\substack{\rightarrow \\ \text{P} \times 1}} \quad \# \text{ solos}$$

$$W_{hg} \in \mathbb{R}^{P \times 1}$$

$t_{\text{cupo}}$

$$h(t-1) \rightarrow h(t-1) \rightarrow \begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$$



$W_{hh}$

$X$

$W$

$h_o^{(t)}$

$h_o^{(2)}$

$h_o^{(1)}$

$W_{hy}$

$g$

$W_{xh}$

$X$

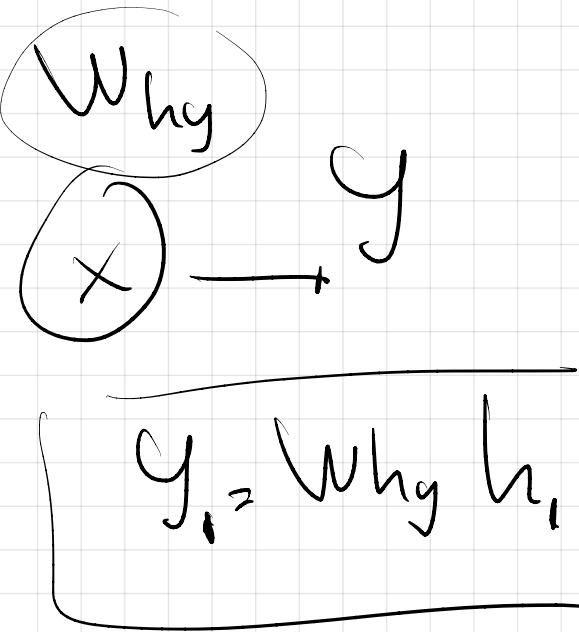
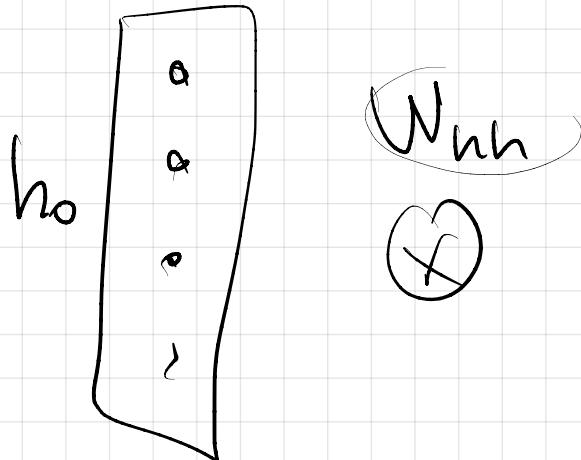
$X_o$

$$Y_o = W_{hy} h_o$$

$$h_{t-1} = h_{1-1} = h_0.$$

$\checkmark$

tempo = 1.



tempo = 2.

