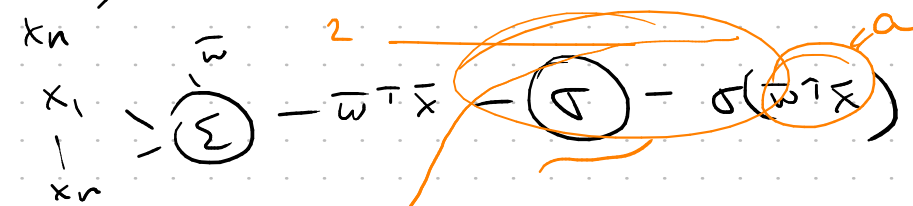
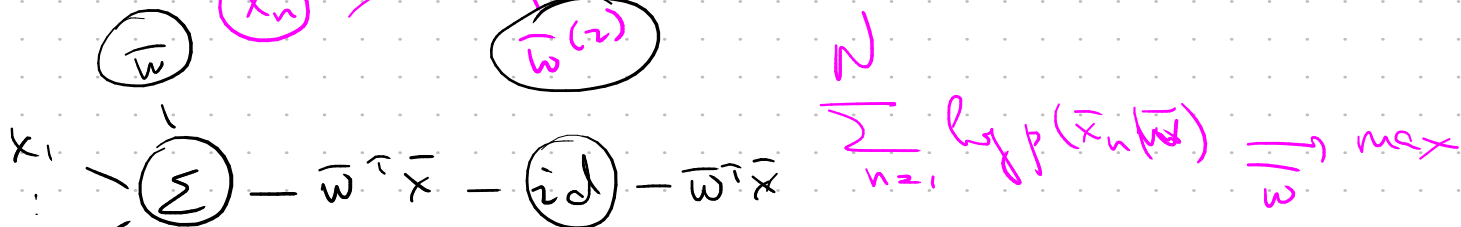
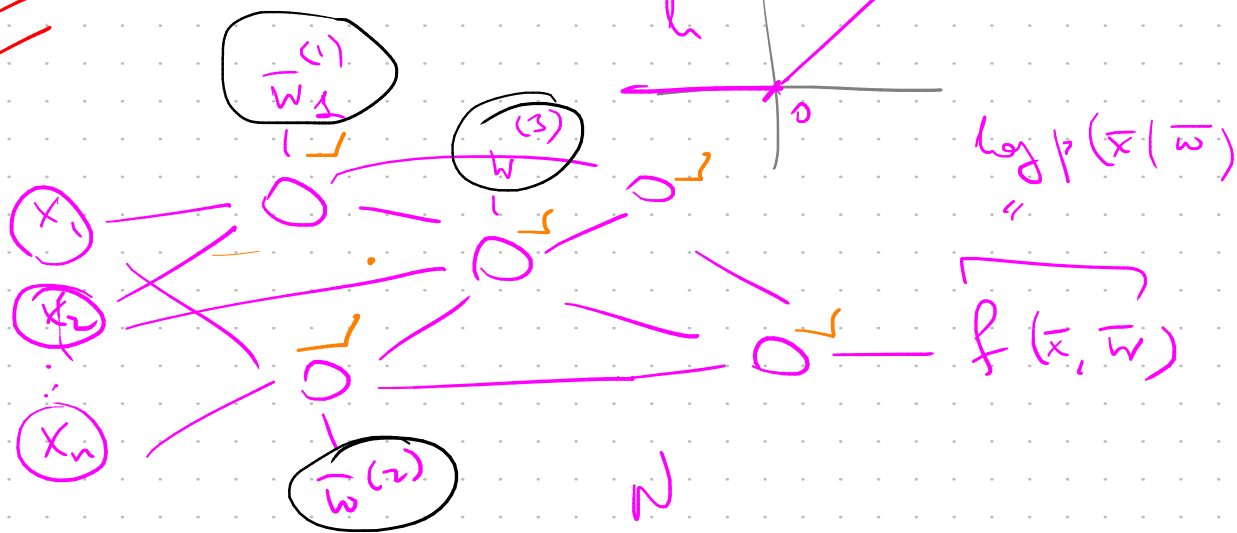
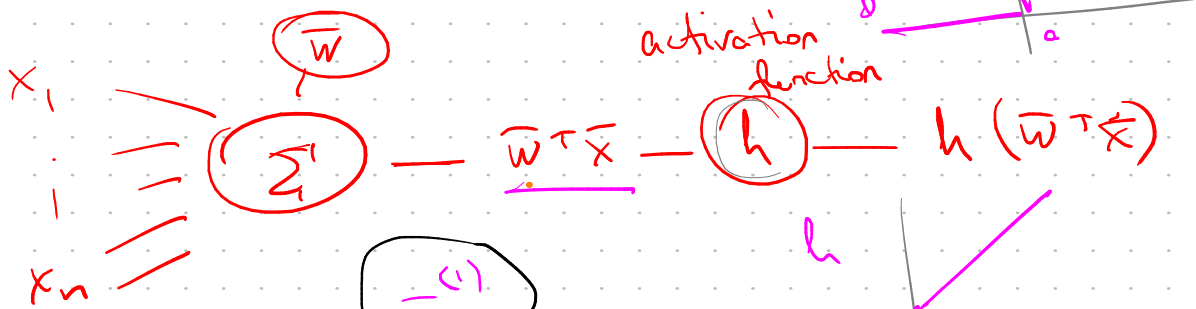


$$p(D|\theta) = \prod_n p(x_n|\theta), \quad p(\theta)$$

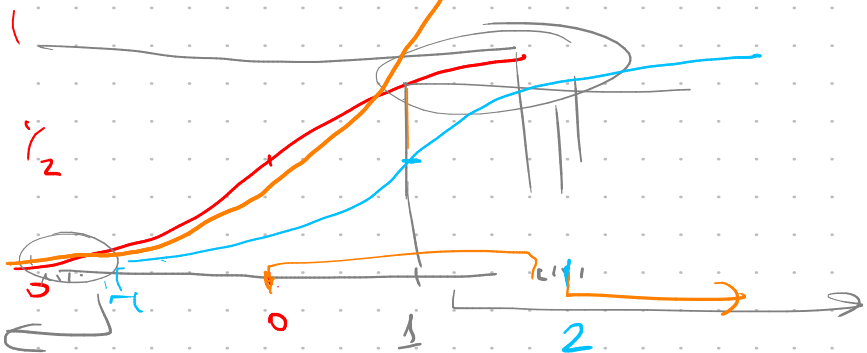
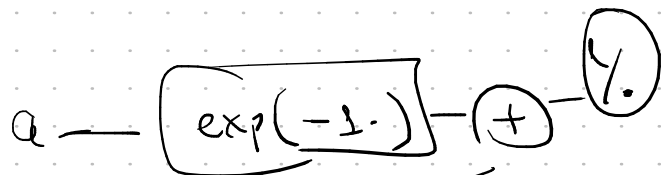
$$\log p(\theta|D) = \log p(\theta) + \sum_n \log p(x_n|\theta) \xrightarrow{\theta} \max \theta_{MAP}$$

$$p(\bar{x}|D) = \int p(\bar{x}|\theta) p(\theta|D) d\theta \approx \sum_z \left[\theta^{(z)} \sim p(\theta|D) \right]$$

Connectionism



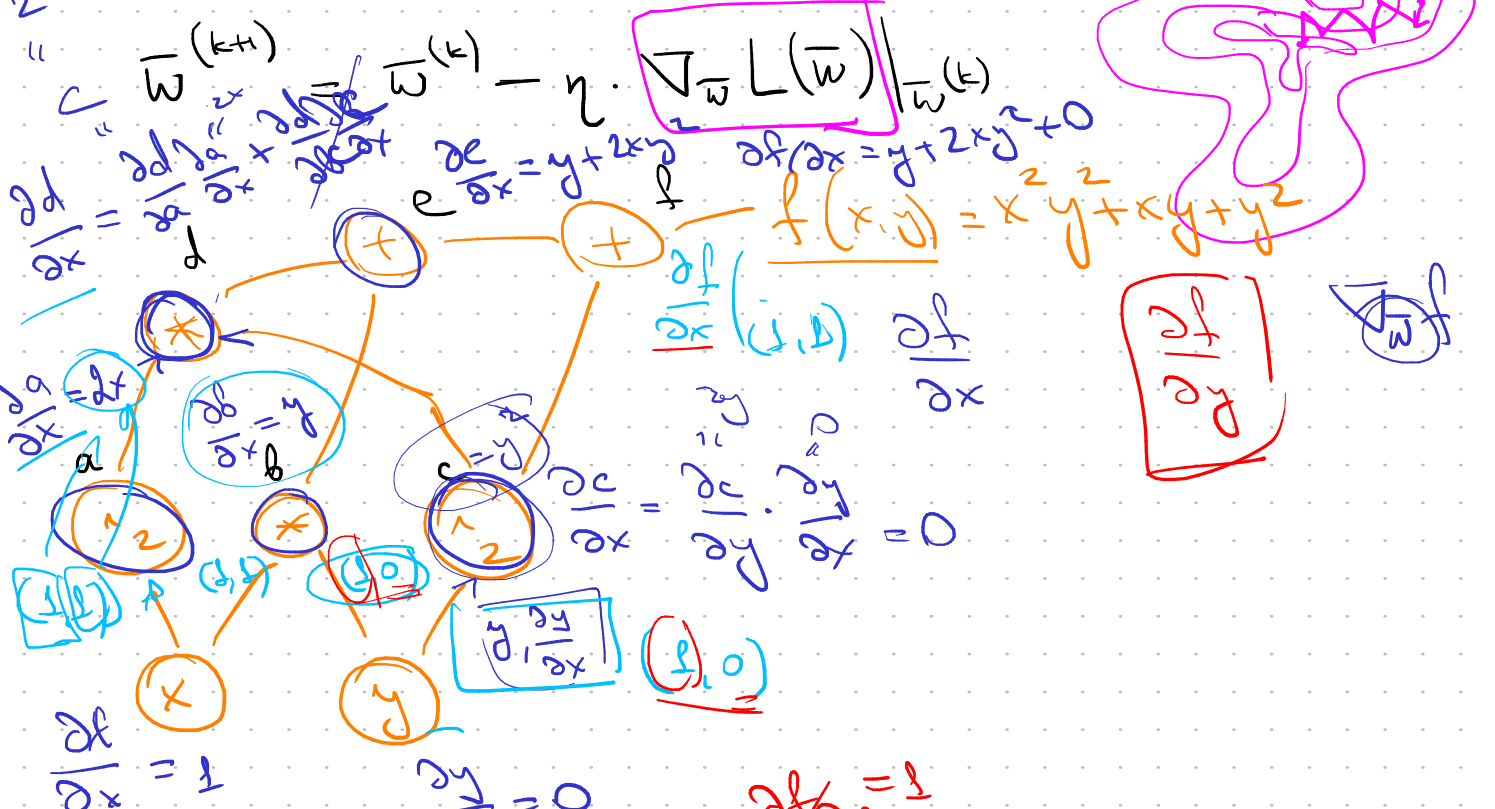
$$\sigma(a) = \frac{1}{1 + e^{-a}}$$



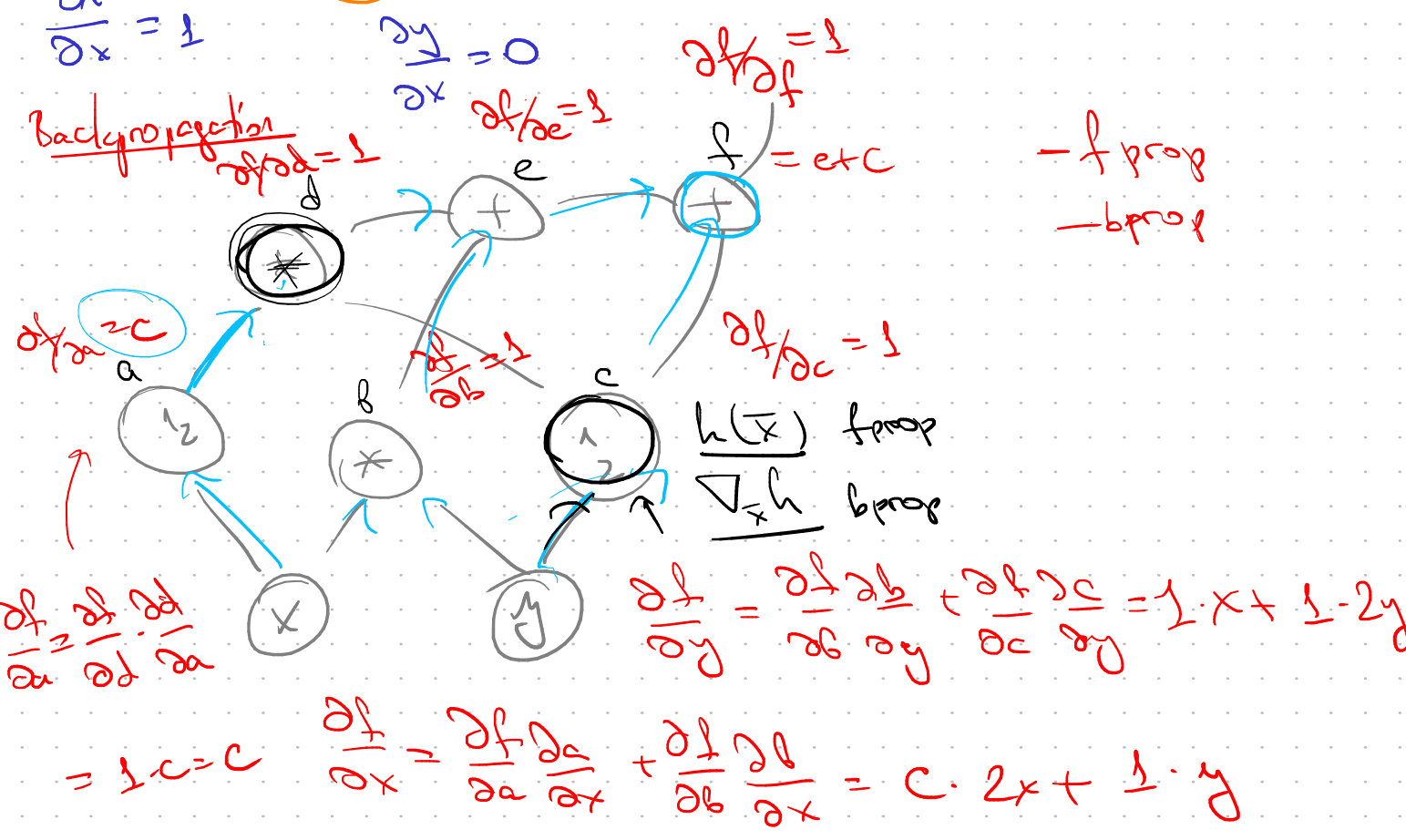
$$L(\bar{w}) = \sum_{n=1}^N L(\bar{x}_n, \bar{w}) \xrightarrow{\bar{w}} \min$$

" $-\log p(\bar{x}_n | \bar{w})$ "

$$2cx = 2xy^2$$



Backpropagation



PyTorch
TensorFlow