1. Forward pass

2. Backward pass, computing the deltas: $\delta_j(t) = -\frac{\partial \mathcal{E}}{\partial net_j(t)}$

Output neuron:

$$\delta_j(t) = \frac{\partial x_j(t)}{\partial net_j^x(t)}(d_j(t) - y_j(t)) \;\text{ for }\; t = 1 \ldots T$$

Hidden neuron:

$$\delta_j(t) = \begin{cases} \frac{\partial x_j(t)}{\partial net_j^x(t)} \left[\sum_{k=1}^{L} \delta_k(t) w_{j,k}^{out}\right] & \text{for } \; t = T \\ \frac{\partial x_j(t)}{\partial net_j^x(t)} \left[\sum_{k=1}^{N} \delta_k(t+1) w_{j,k} + \sum_{l=1}^{L} w_{j,l}^{out} \delta_l(t)\right] & \text{for } \; 1 < t < T \end{cases}$$

Weight change: $$\Delta w_{ji} = \eta \sum_{t=2}^{T} \delta_j(t) x_i(t-1)$$