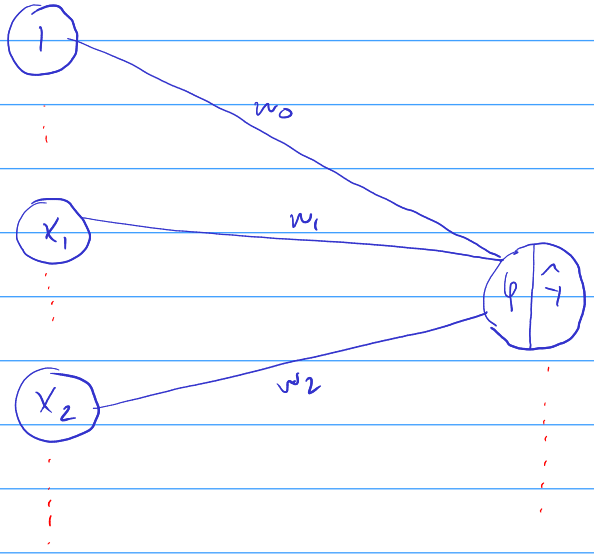
(*) Graphical presentation / neuron network Presentation of

Liner regression

$$\hat{y} = w_0 + w_1 x_1 + w_2 x_2$$



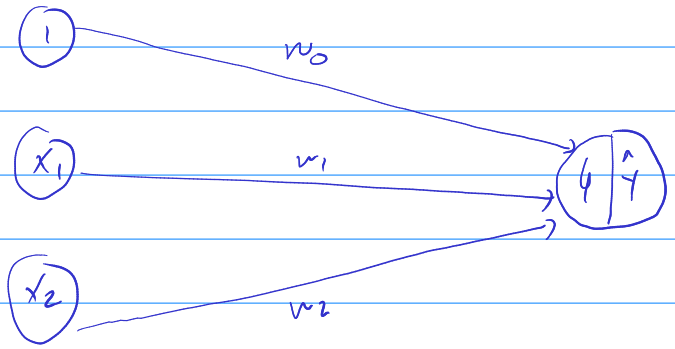
$$\varphi(t) = t$$

input layer

output layer

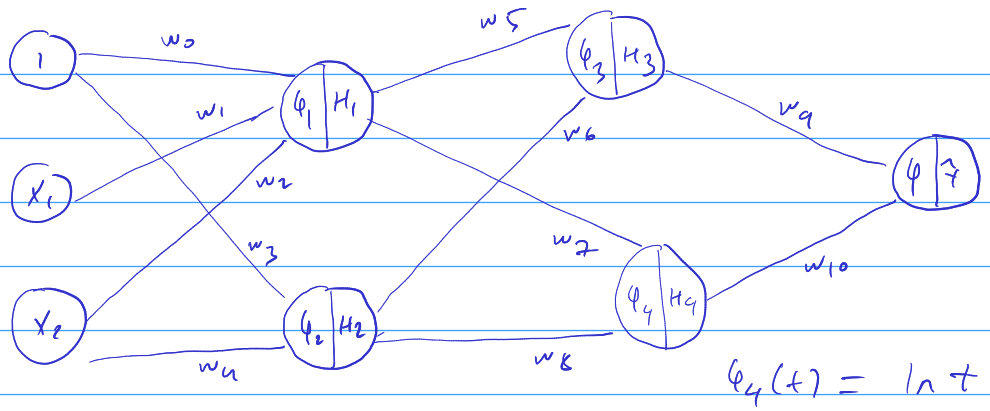
(*) Logistic Regression

$$\hat{y} = \frac{1}{1 + e^{-(w_0 + w_1 x_1 + w_2 x_2)}}$$



$$\varphi(t) = \frac{1}{1 + e^{-t}}$$

$\varphi_1(t) = t^2$ $\varphi_3 = \frac{1}{t}$ $\varphi(t) = t$



$\varphi_4(t) = \ln t$

$\varphi_2(t) = \cos(t)$