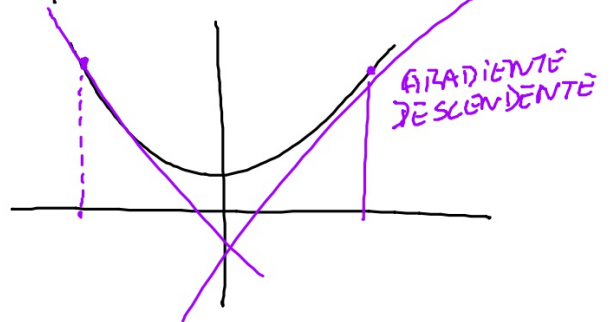


$$\begin{aligned} \text{ERRO} &= (d - y) \\ &= (d - g(u)) \\ &= (d - [x_1 w_1 + x_2 w_2 - \theta])^2 \end{aligned}$$



$$E = (d - y)^2 \quad E = \frac{1}{2}(d - y)^2$$

$$E = (d - [x_0 w_0 + x_1 w_1 + x_2 w_2])^2 = u^2 \quad \frac{\partial E}{\partial u} = 2u$$

$$\frac{\partial E}{\partial w} = \frac{\partial E}{\partial u} \cdot \frac{\partial u}{\partial w}$$

$$u = d - [x_0 w_0 + x_1 w_1 + x_2 w_2]$$

$$\frac{\partial u}{\partial w_0} = -x_0$$

$$w = w + \eta (d - u) \cdot x$$

$$\frac{\partial E}{\partial w} = 2u \cdot -x$$

$$= 2(d - [x_0 w_0 + x_1 w_1 + x_2 w_2]) \cdot -x$$

$$= -1(d - [x^T w]) \cdot x$$

$$(d - u) \cdot x$$

$$EQM = \frac{\frac{1}{2} \sum_{i=0}^n (y_i - u)^2}{n}$$

