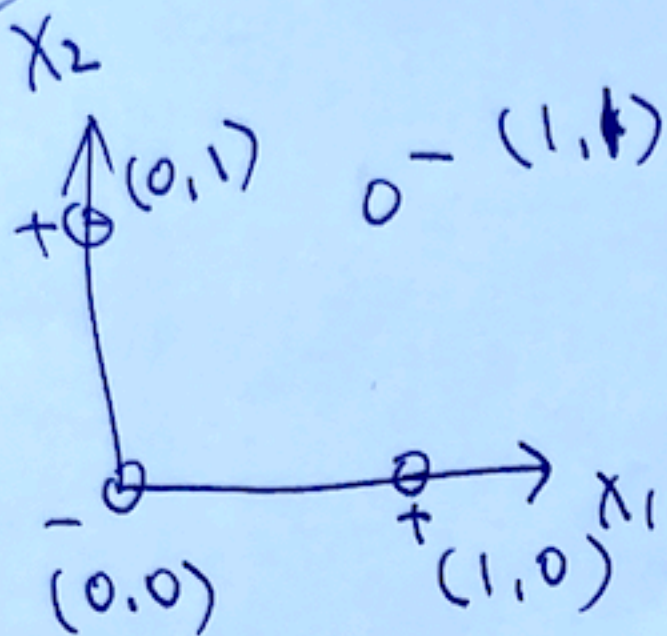


XOR



$$\tanh(0+0) = 0$$

$$\tanh(0+1) = \tanh(1+0) \approx 0.76$$

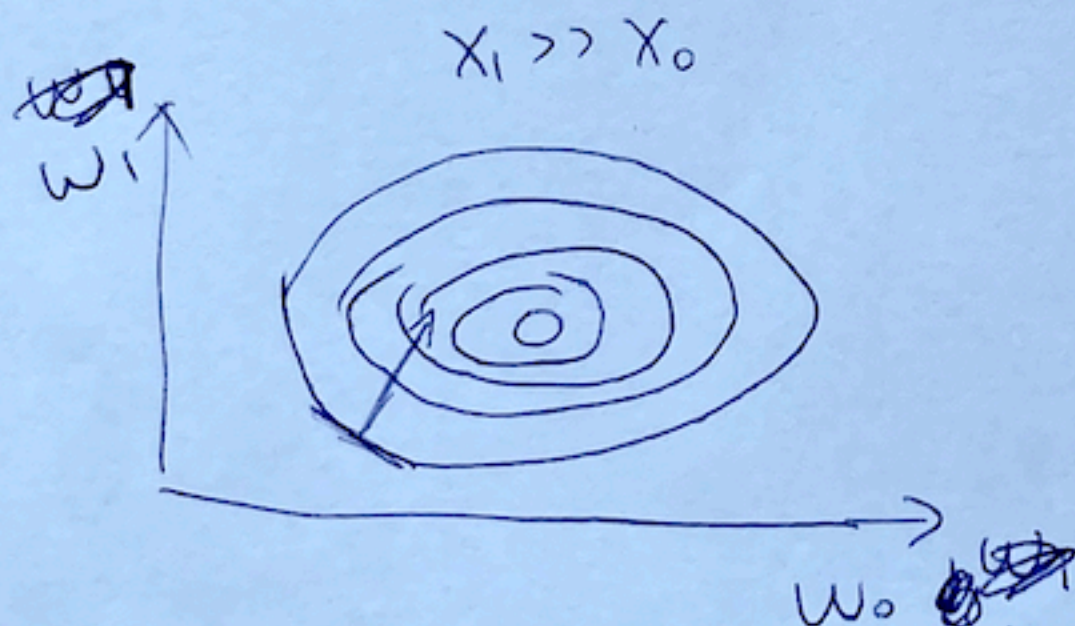
$$\tanh(1+1) \approx 0.96$$

x	y
(0,0)	→ 0
(1,0)	→ $-1 + 2 \times 0.76 = 0.52$
(0,1)	→ $-1 + 2 \times 0.76 = 0.52$
(1,1)	→ $-2 + 2 \times 0.96 = -0.08$

Feature scaling → [0~1] or [-1, 1]

$$W^T X = w_1 x_1 + w_2 x_2 + w_0 x_0$$

$x_1 \gg x_0$



~~$$L = \frac{1}{2} (W^T x - \log(1 + \exp(W^T x)))$$~~

$$-L = -\log P(y|x)$$

=

