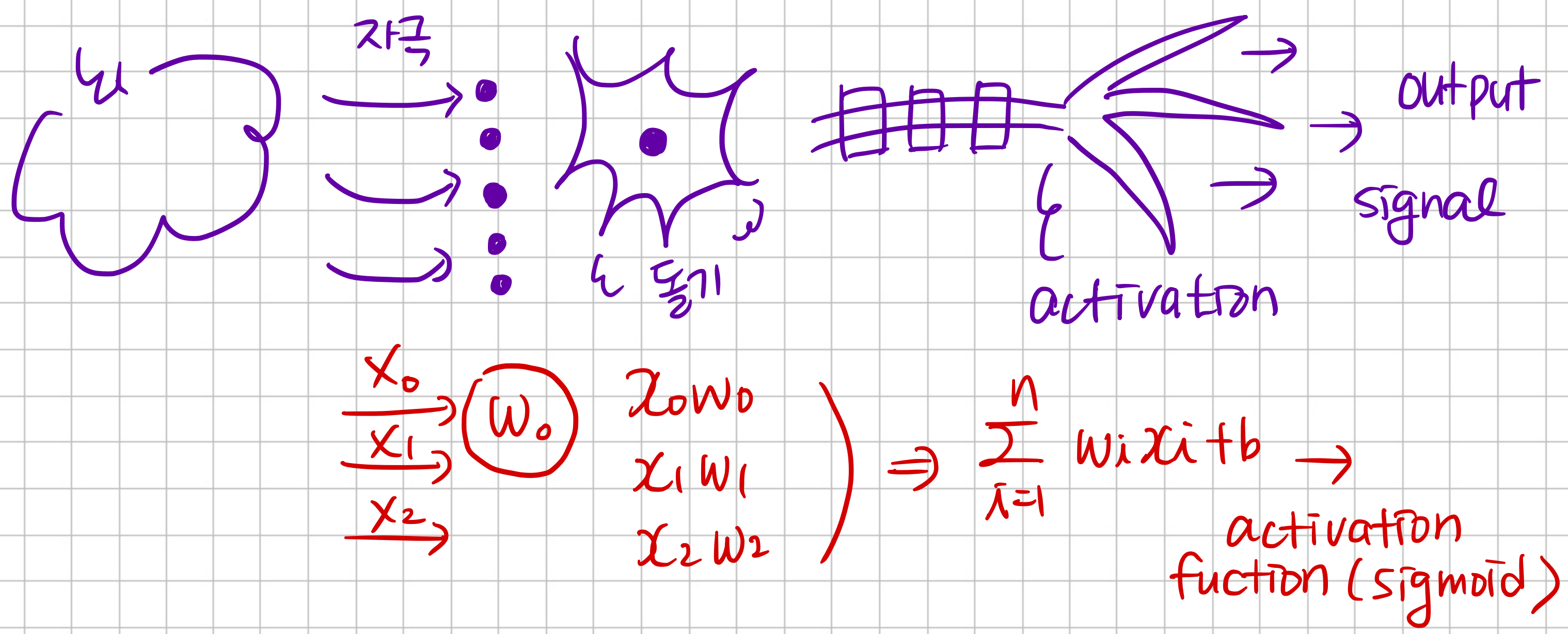
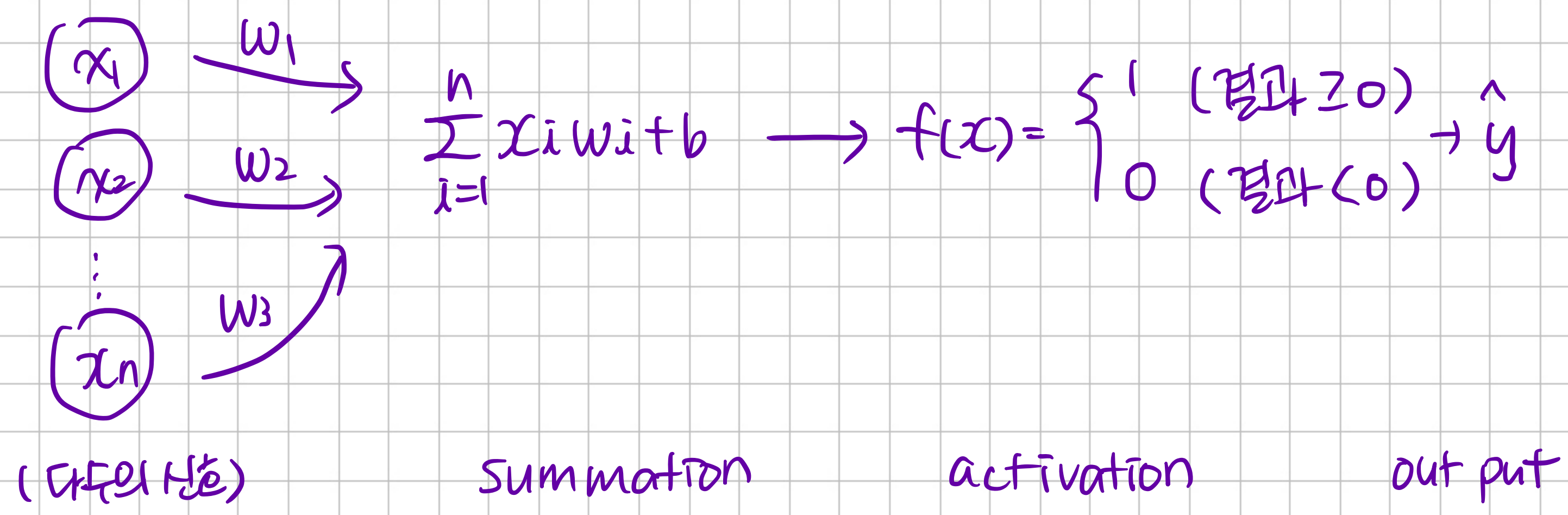


Perceptron



* Single Layer Perception Network
→ Logistic Regression



and/or/xor

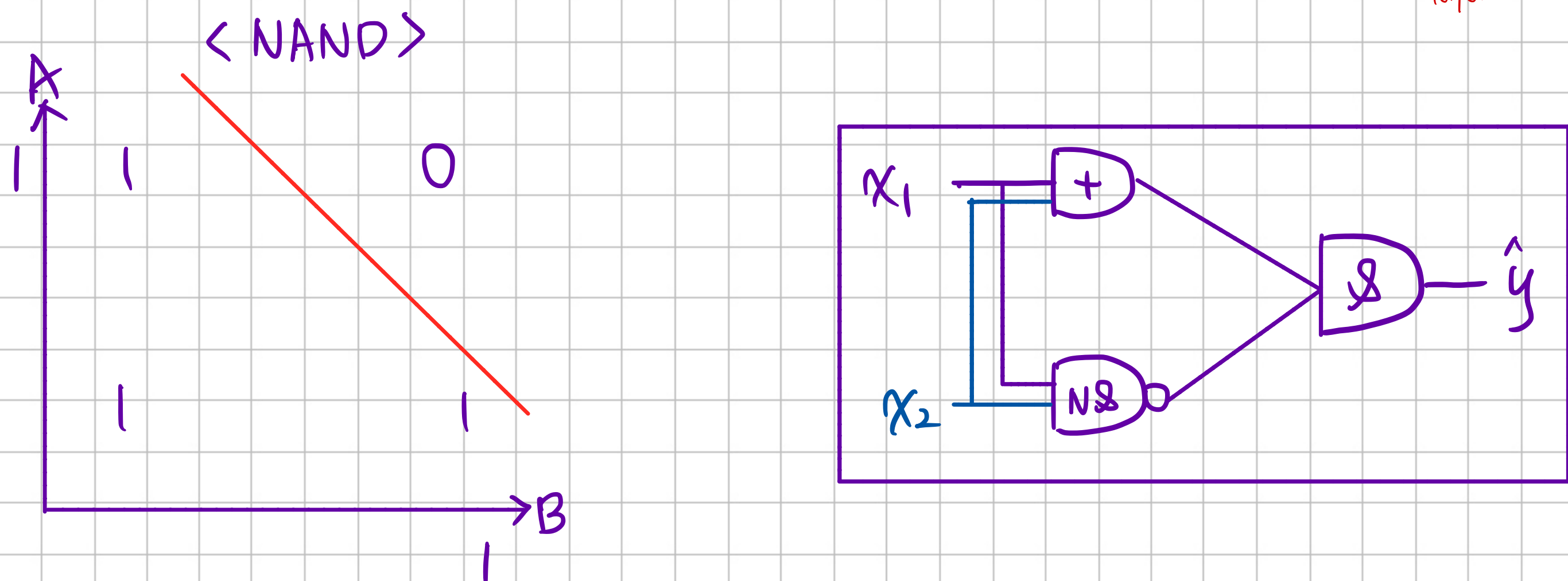
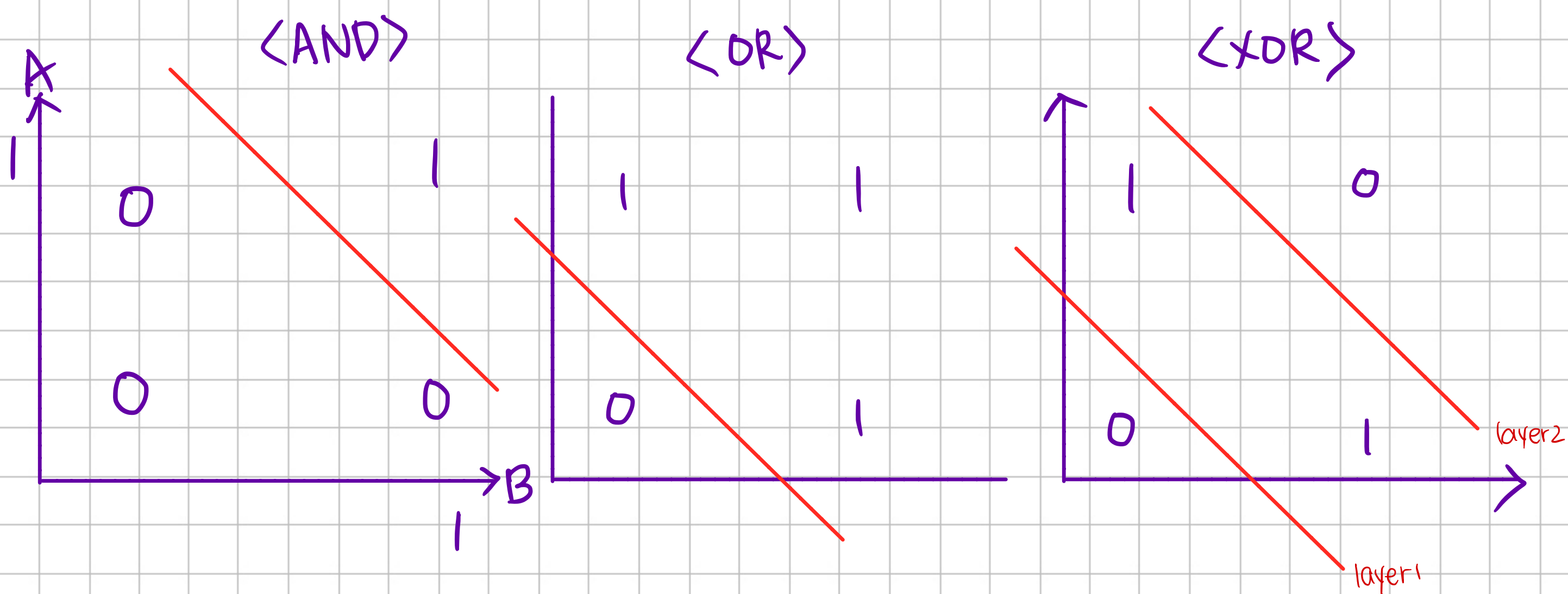
$$y = \begin{cases} 0 & (w_1 x_1 + w_2 x_2 \leq b) \\ 1 & (w_1 x_1 + w_2 x_2 > b) \end{cases}$$

↕

$$y = \begin{cases} 0 & (w_1 x_1 + w_2 x_2 - b \leq 0) \\ 1 & (w_1 x_1 + w_2 x_2 - b > 0) \end{cases}$$

threshold bias

AND			OR			XOR		
a	b	y	a	b	y	a	b	y
0	0	0	0	0	0	0	0	0
0	1	0	0	1	1	0	1	1
1	0	0	1	0	1	1	0	1
1	1	1	1	1	1	1	1	0



< Deep learning = Deep Neural Network >

1개의 logistic regression을 나타내는 노드(Node)가 서로 연결되어 있는 신경망구조를 바탕으로
Input layer + 1개 이상의 Hidden layer + output layer로 이루어진다
결정층 노드를 기반으로 각 node의 가중치를 학습시키는 머신러닝의 한 분야

<개념도>

