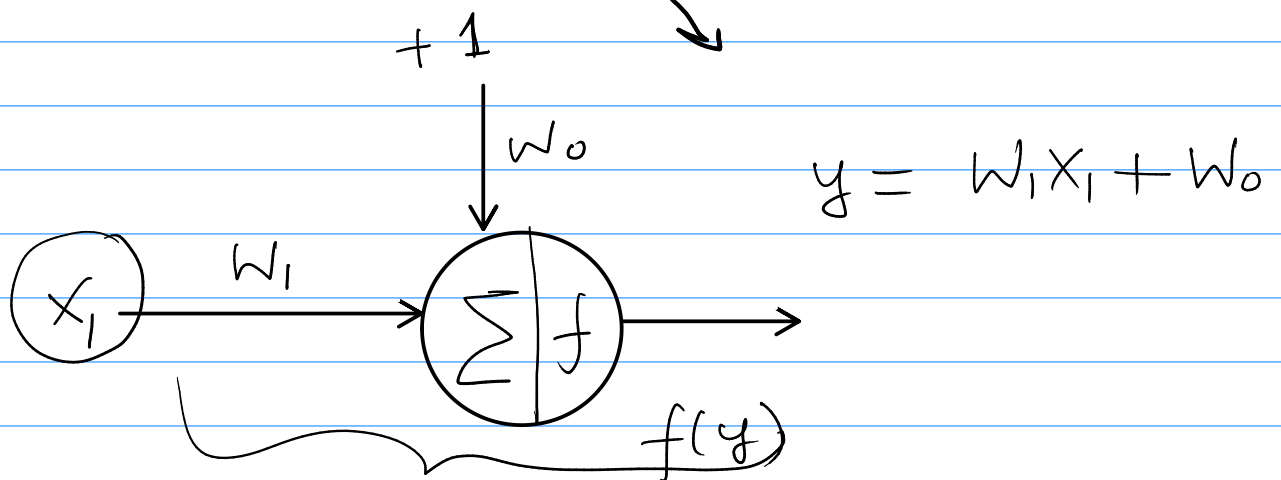
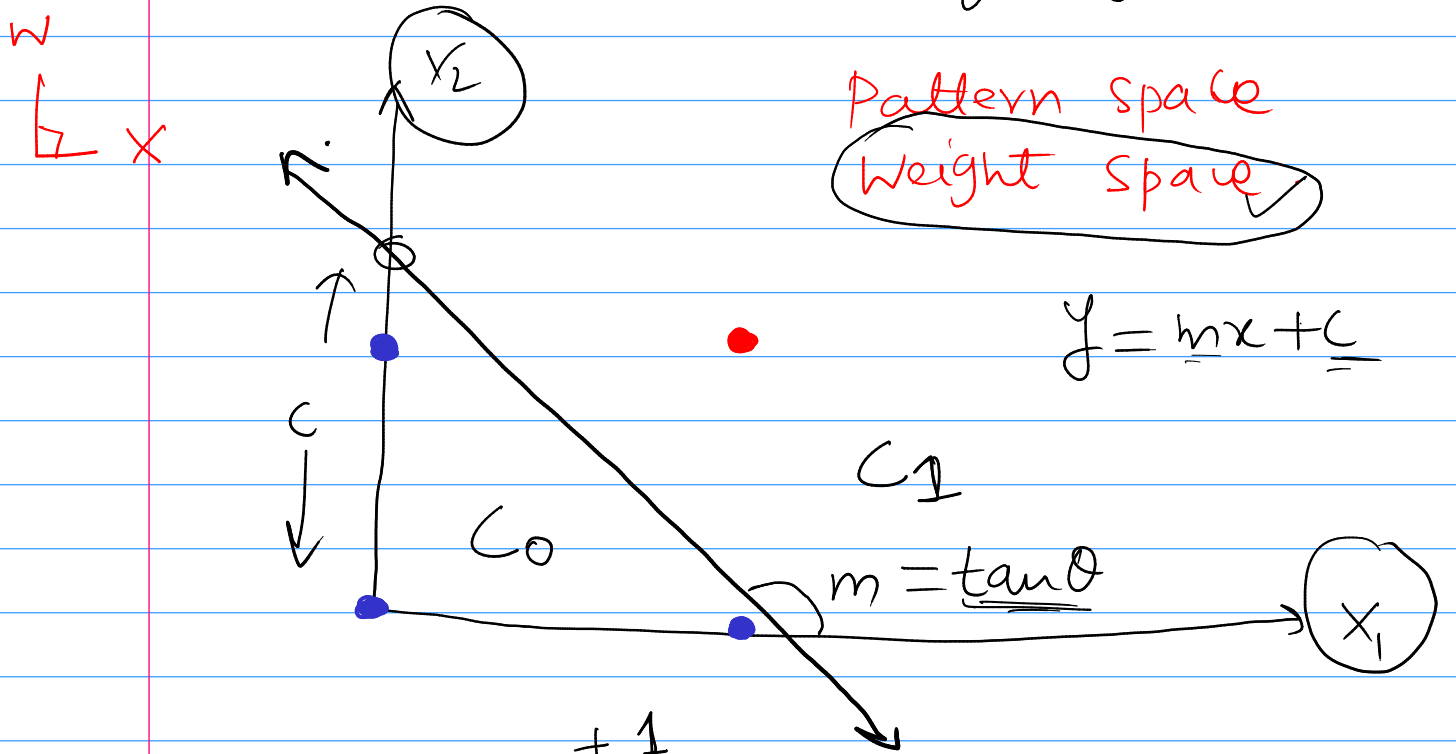
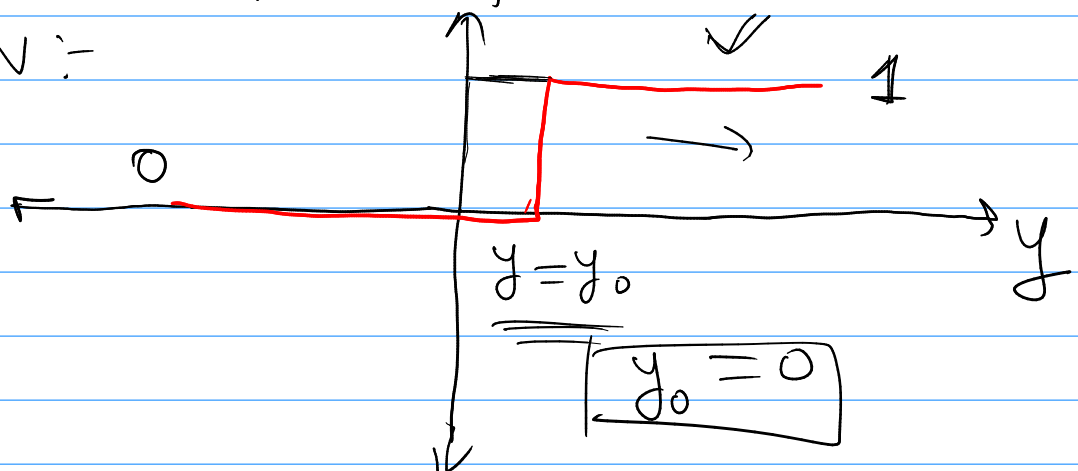


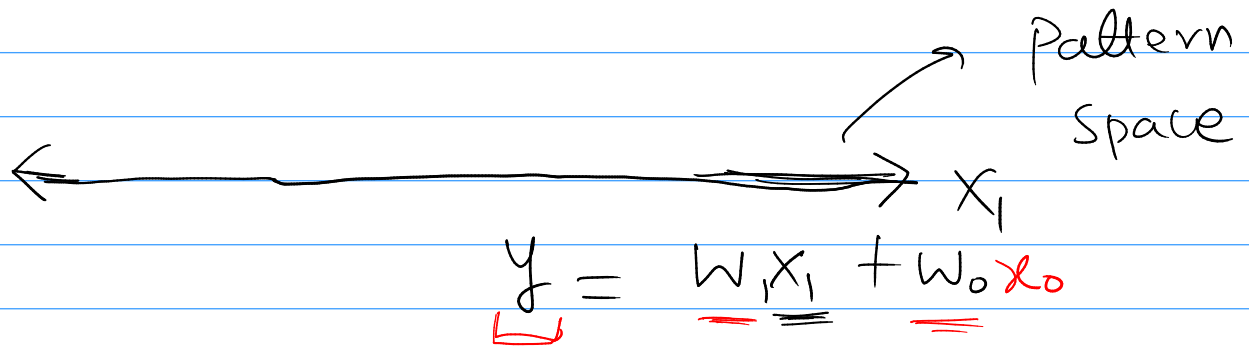
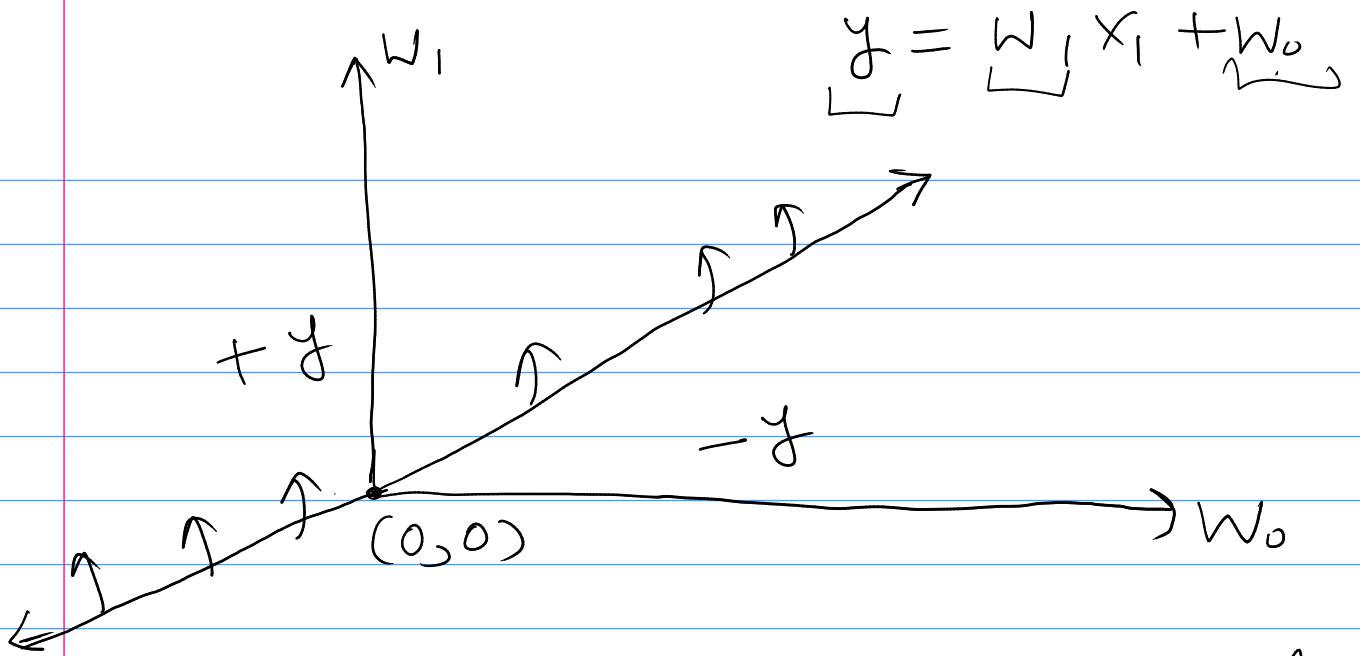
XOR Gate) Not linearly separable Problem
 Multiperception Model.

AND/OR \div Arbitrary weights.



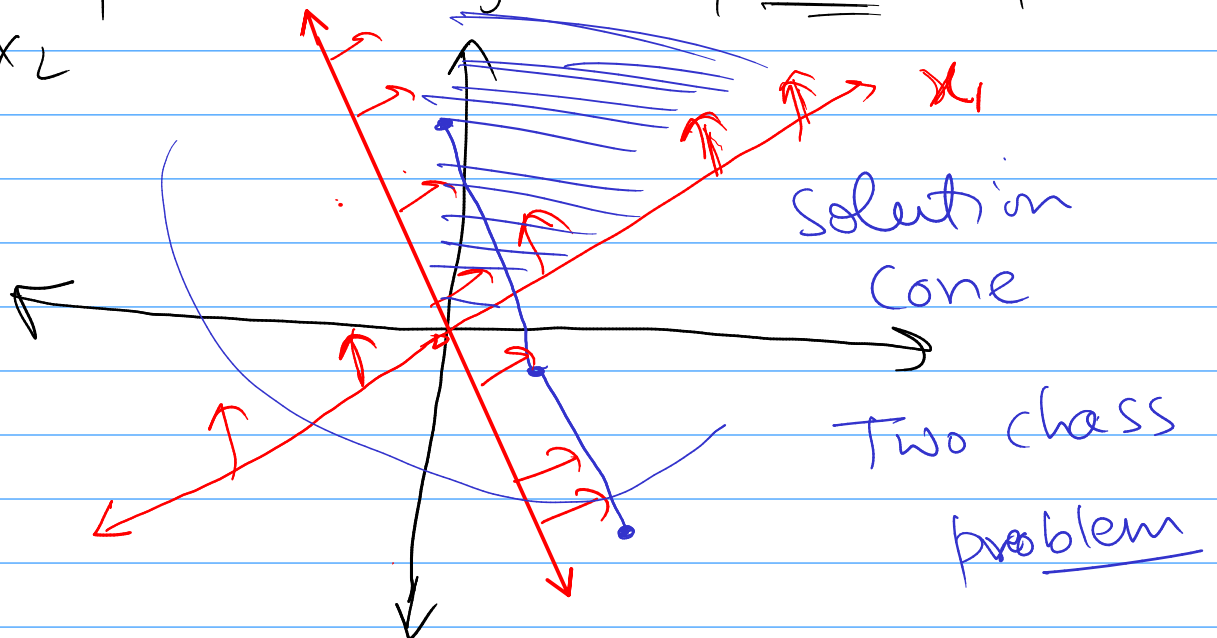
BTLN :-



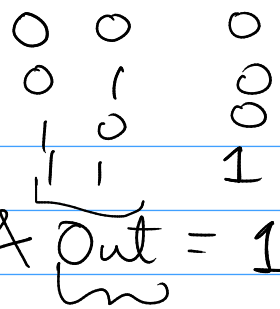


Weight space x_1, x_2 orthogonal pattern space

$\begin{Bmatrix} 1 \\ 0 \end{Bmatrix}$



⇒ Multi layered Perceptron Model
Weight Update Algorithm.



$$W_{k+1} = W_k + X_k \quad \text{if } y < 0 \text{ \& } \text{out} = 1$$

$$W_{k+1} = W_k - X_k \quad \text{if } y > 0 \text{ \& } \text{out} = 0$$

x_0	x_1	x_2	w_0	w_1	w_2	y	Δ	w'_0	w'_1	w'_2
1	0	0	0.5	0.5	0.5	0.5	0	-0.5	0.5	0.5
1	0	1	-0.5	0.5	0.5	0	0	-1.5	-0.5	-0.5
1	1	0	-1.5	-0.5	-0.5	-2	0	"	"	"
1	1	1	"	"	"	-2.5	1	-0.5	0.5	0.5
1	0	0	-0.5	0.5	0.5	-0.5	0	"	"	"
1	0	1	"	"	"	0	0	-1.5	0.5	-0.5
1	1	0	-1.5	0.5	-0.5	-1	0	"	"	"
1	1	1	"	"	"	-1.5	1	-0.5	1.5	0.5

DIVA

Dec 3rd
12 PM