1.

Mcculloch Pitt's Neuron model

Assuming $w_1 = w_2 = 2$ (weights) and t = 1 threshold. For A = B = 0 $y_{1n} = 0.2 + 0.2 = 0$ $y_{1n} \in T$ 'yout = 0 Hence satisfying our output.

For A=0 and B=1, $y_in = 0.2 + 1.2 = 2$ $y_{in} > T$ $y_{out} = 1$ $y_{in} = 1.2 + 0.2 = 2$ $y_{in} = T$ $y_{out} = 0$ Hence $y_{out} = 0$ $y_{out} = 0$

For A=1, and B=1 yin = 1.2+1.2 = 4

'' yin = T, your = 1

Hence ratisfying our output:

: The truth table;

	Input X,	Input X2	output	Zin	T	Net output	
	0	0	0	0	4	0	
The second second	0	1	0	2	4	0	
	1	0	0	2	4	0	
1		1	1	4	4	1	

2: OR gate: A - Output

A XI) WI	A	В	output	I TO SERVICE S
WZ (T) > y	0	0	. 0	THE PERSON
B ->(X2)	0	1	1	TO COLUMN
	1	0	1	THE REAL PROPERTY.
	Land Land	1		THE REAL PROPERTY.

$$y_{out} = \left\{ \begin{array}{l} 1 & \text{if } \stackrel{\triangle}{\underset{i=1}{\text{if }}} x_i w_i > T \\ 0 & \text{if } \stackrel{\triangle}{\underset{i=1}{\text{if }}} x_i w_i < T \end{array} \right.$$

Assuming W,=Wz = 2 (weights) and T=2 (threshold)

· · yin = T ; yout = 0 ! · · · Satisfies our output.

For A = 1 and B = 0; yin = 1.2 + 0.2 = 2 : Yin = T; yout = 1 : Satisfies our output

For A = B = 1; yin = 1.2 + 1.2 = 4 yin = 7; yout = 1 yin = 4yin = 1.2 + 1.2 = 4

: The +ru+n table:

Input X,	Input Xz	OUtput	zin	7	NET OUT PUT	
0	0	Ó	0	2	0	
0	1		2	2	1	1000000
1	0	1	2	2	1	N. 17.7.10
1	1	1	4	2)	THE REAL PROPERTY.
	Input X, 0 0 1	Input X, Input X2 0 0 0 1 1 0	Input X, Input X2 Output 0 0 0 0 1 1 1 1 0 1 1 1	Input X, Input X2 Output Zin 0 0 0 0 0 0 1 1 2 1 0 1 2 1 1 1 4	Input X, Input X2 Output Zin T 0 0 0 0 0 2 0 1 1 2 2 1 0 1 2 2 1 1 1 1 4 2	Input X, Input X2 Output Zin T Net output 0 0 0 0 2 0 0 1 1 2 2 1 1 0 1 2 2 1 1 1 1 4 2 1