## AND GATE

S	X1	х	2 X3		Z	W1i	W2i	W3i	K	Υ	D	W1f	W2f	W3f	bias	alpha	Threshold
1	L	0	0	0	(	0.1	0.1	0.1	0	0	0	0.1	0.1	0.1	0	0.1	0.5
		0	0	1	(	0.1	0.1	0.1	0.1	0	0	0.1	0.1	0.1	0	0.1	0.5
		0	1	0	(	0.1	0.1	0.1	0.1	0	0	0.1	0.1	0.1	0	0.1	0.5
		0	1	1	(	0.1	0.1	0.1	0.2	0	0	0.1	0.1	0.1	0	0.1	0.5
2	2	1	0	0	(	0.1	0.1	0.1	0.1	0	0	0.1	0.1	0.1	0	0.1	0.5
		1	0	1	(	0.1	0.1	0.1	0.2	0	0	0.1	0.1	0.1	0	0.1	0.5
		1	1	0	(	0.1	0.1	0.1	0.2	0	0	0.1	0.1	0.1	0	0.1	0.5
		1	1	1	1	0.1	0.1	0.1	0.3	0	1	0.2	0.2	0.2	0	0.1	0.5
3	3	0	0	0	(	0.2	0.2	0.2	0	0	0	0.2	0.2	0.2	0	0.1	0.5
		0	0	1	(	0.2	0.2	0.2	0.2	0	0	0.2	0.2	0.2	0	0.1	0.5
		0	1	0	(	0.2	0.2	0.2	0.2	0	0	0.2	0.2	0.2	0	0.1	0.5
		0	1	1	(	0.2	0.2	0.2	0.4	0	0	0.2	0.2	0.2	0	0.1	0.5
4	ı	1	0	0	(	0.2	0.2	0.2	0.2	0	0	0.2	0.2	0.2	0	0.1	0.5
		1	0	1	(	0.2	0.2	0.2	0.4	0	0	0.2	0.2	0.2	0	0.1	0.5
		1	1	0	(	0.2	0.2	0.2	0.4	0	0	0.2	0.2	0.2	0	0.1	0.5
		1	1	1	1	0.2	0.2	0.2	0.6	1	0	0.2	0.2	0.2	0	0.1	0.5

## **OR GATE**

S	X1	X2	Х3	Z	W1i	W2i	W3i	K	Υ	D	W1f	W2f	W3f	bias	alpha	Thresh
1	0	0	0	0	0.1	0.1	0.1	0	0	0	0.1	0.1	0.1	. 0	0.1	. (
	0	0	1	1	0.1	0.1	0.1	0.1	0	1	0.1	0.1	0.2	. 0	0.1	. (
	0	1	0	1	0.1	0.1	0.2	0.1	0	1	0.1	0.2	0.2	. 0	0.1	. (
	0	1	1	1	0.1	0.2	0.2	0.4	0	1	0.1	0.3	0.3	0	0.1	
2	1	0	0	1	0.1	0.3	0.3	0.1	0	1	0.2	0.3	0.3	0	0.1	. (
	1	0	1	1	0.2	0.3	0.3	0.5	0	1	0.3	0.3	0.4	. 0	0.1	. (
	1	1	0	1	0.3	0.3	0.4	0.6	1	0	0.3	0.3	0.4	. 0	0.1	. (
	1	1	1	1	0.3	0.3	0.4	1	1	0	0.3	0.3	0.4	. 0	0.1	. (
3	0	0	0	0	0.3	0.3	0.4	0	0	0	0.3	0.3	0.4	0	0.1	. (
	0	0	1	1	0.3	0.3	0.4	0.4	0	1	0.3	0.3	0.5	0	0.1	. (
	0	1	0	1	0.3	0.3	0.5	0.3	0	1	0.3	0.4	0.5	0	0.1	. (
	0	1	1	1	0.3	0.4	0.5	0.9	1	0	0.3	0.4			0.1	. (
4	1	0	0	1	0.3	0.4	0.5	0.3	0	1	0.4	0.4		_	0.1	. (
	1	0	1	1	0.4	0.4	0.5	0.9	1	0	0.4	0.4		_	0.1	. (
	1	1	0	1	0.4	0.4	0.5	0.8	1	0		0.4				
	1	1	1	1	0.4	0.4	0.5	1.3	1	0		0.4				
5	0	0	0	0	0.4		0.5	0	0	0		0.4		_		
	0	0	1	1	0.4		0.5	0.5	0	1		0.4				
	0	1	0	1	0.4	0.4	0.6	0.4	0	1	0.4	0.5	0.6	0	0.1	. (
	0	1	1	1	0.4	0.5	0.6	1.1	1	0	0.4	0.5	0.6	0	0.1	. (

## NAND GATE

S	X1	X2	хз	Z	W1i	W2i	W3i	K	Υ	D	W1f	W2f	W3f	bias	alpha	Thresho
1	. 0	C	(	1	0.1	0.1	0.1	1	1	0	0.1	0.1	0.1	1	0.1	. 0.
	0	C	1	. 1	0.1	0.1	0.1	1.1	1	0	0.1	0.1	0.1	1	0.1	. 0.
	0	1	. (	1	0.1	0.1	0.1	1.1	1	0	0.1	0.1	0.1	1	0.1	. 0.
	0	1	. 1	. 0	0.1	0.1	0.1	1.2	1	-1	0.1	0	0	1	0.1	. 0.
2	. 1	C	(	1	0.1	0	0	1.1	1	0	0.1	0	0	1	0.1	. 0.
	1	C	1	. 1	0.1	0	0	1.1	1	0	0.1	0	0	1	0.1	0.
	1	1	. (	1	0.1	0	0	1.1	1	0	0.1	0	0	1	0.1	. <b>0.</b>
	1	1	. 1	. 0	0.1	0	0	1.1	1	-1	0	-0.1	-0.1	1	0.1	. <b>0.</b>
3	0	C	(	1	0	-0.1	-0.1	1	1	0	0	-0.1	-0.1	1	0.1	. 0.
	0	C	1	. 1	0	-0.1	-0.1	0.9	1	0	0	-0.1	-0.1	1	0.1	0.
	0	1		1	0	-0.1	-0.1	0.9	1	0	0	-0.1	-0.1	1	0.1	. <b>0.</b>
	0	1	. 1	. 0	0	-0.1	-0.1	0.8	1	-1	0	-0.2	-0.2	1	0.1	. 0.
4	1	C	(	1	. 0	-0.2	-0.2	1	1	0	0	-0.2	-0.2	1	0.1	
	1	C	1	. 1	0	-0.2	-0.2	0.8	1	0	0	-0.2	-0.2	1	0.1	. 0.
	1	1	. (	1	0	-0.2	-0.2	0.8	1	0	0	-0.2	-0.2	1	0.1	
	1	1	. 1	. 0	0			0.6	1	-1	-0.1	-0.3	-0.3	1	0.1	
5	0	C	(	1	-0.1			1	1	0						
	0	C	1	. 1	-0.1			0.7	1	0					0.12	
	0	1	. (	1	-0.1	-0.3	-0.3	0.7	1	0	-0.1	-0.3	-0.3	1	0.1	. 0.
	0	1	. 1	. 0	-0.1	-0.3	-0.3	0.4	0	0	-0.1	-0.3	-0.3	1	0.1	0.

## **NOR GATE**

S	X1	X	2 X3		Z	W1i	W2i	W3i	K	Υ	D	W1f	W2f	W3f	bias	alpha	Thresh
1		ו	0	0	1	0.1	0.1	0.1	1	1	0	0.1	0.1	0.1	1	0.1	. (
	(	ו	0	1	C	0.1	0.1	0.1	1.1	1	-1	0.1	0.1	0	1	0.1	. (
	(	כ	1	0	C	0.1	0.1	0	1.1	1	-1	0.1	0	0	1	0.1	. (
	C	ס	1	1	С	0.1	0	0	1	1	-1	0.1	-0.1	-0.1	1	0.1	. (
2	. 1	1	0	0	1	0.1	-0.1	-0.1	1.1	1	0	0.1	-0.1	-0.1	1	0.1	. (
	1	1	0	1	C	0.1	-0.1	-0.1	1	1	-1	0	-0.1	-0.2	1	0.1	. (
	1	1	1	0	C	0	-0.1	-0.2	0.9	1	-1	-0.1	-0.2	-0.2	1	0.1	. (
	1	1	1	1	C	-0.1	-0.2	-0.2	0.5	0	0	-0.1	-0.2	-0.2	1	0.1	. (
3	C	כ	0	0	1	-0.1	-0.2	-0.2	1	1	0	-0.1	-0.2	-0.2	1	0.1	. (
	(	)	0	1	C	-0.1	-0.2	-0.2	0.8	1	-1	-0.1	-0.2	-0.3	1	0.1	. (
	(	כ	1	0	C	-0.1	-0.2	-0.3	0.8	1	-1	-0.1	-0.3	-0.3	1	0.1	. (
	(	כ	1	1	C	-0.1	-0.3	-0.3	0.4	0	0	-0.1	-0.3	-0.3	1	0.1	. (
4	1	1	0	0	1	-0.1	-0.3	-0.3	0.9	1	0	-0.1	-0.3	-0.3	1	0.1	. (
	1	1	0	1	C	-0.1	-0.3	-0.3	0.6	1	-1	-0.2	-0.3	-0.4	1	0.1	. (
	1	1	1	0	C	-0.2	-0.3	-0.4	0.5	0	0	-0.2	-0.3	-0.4	1	0.1	. (
	1	1	1	1	C	-0.2	-0.3	-0.4	0.1	0	0	-0.2	-0.3	-0.4	1	0.1	. (
5		ס	0	0	1	-0.2	-0.3	-0.4	1	1	0	-0.2	-0.3	-0.4	1	0.1	
	(	ס	0	1	C	-0.2	-0.3	-0.4	0.6	1	-1	-0.2	-0.3	-0.5	1	0.1	(
	C	ס כ	1	0	C	-0.2	-0.3	-0.5	0.7	1	-1	-0.2	-0.4	-0.5	1	0.1	. (
	(	ס	1	1	С	-0.2	-0.4	-0.5	0.1	0	0	-0.2	-0.4	-0.5	1	0.1	. (