

1.

Neuron Truth Table

A	B	C	$B + AB + \overline{C}$	inequalities	out
0	0	0	0	$0 < T; T = 1.5$	$0 < 1.5$
0	0	1	0	$w_c < T$	$-2 < 1.5$
0	1	0	1	$w_b \geq T$	$3 \geq 1.5$
0	1	1	0	$w_b + w_c < T$	$1 < 1.5$
1	0	0	0	$w_a < T$	$-1 < 1.5$
1	0	1	0	$w_a + w_c < T$	$-3 < 1.5$
1	1	0	1	$w_a + w_b \geq T$	$2 \geq 1.5$
1	1	1	0	$w_a + w_b + w_c < T$	$0 < 1.5$

2. Possible threshold ranges for neuron  $B + AB + \overline{C}$

**(+1, +3], exclusive**