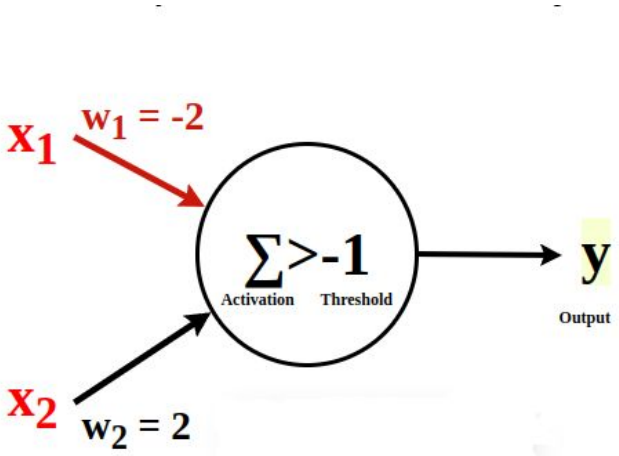
Neuron Sandbox Assessment 1

https://www.cs.cmu.edu/~dst/NeuronSandbox

1. Fill in the activation value and the current output value for each row of the table.

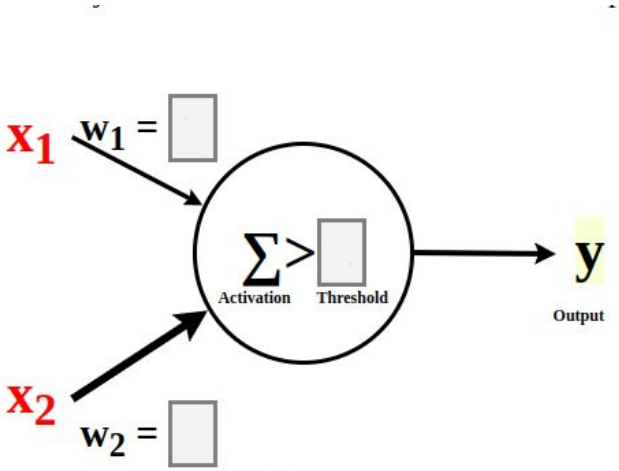
Inputs	
x_1	x_2
0	0
0	1
1	0
1	1



Activation Σ	Current Output Σ > -1

2. Fill in the weight values w_1 and w_2 to produce the activations shown. Then fill in the threshold value to produce the outputs shown.

Inputs	
x_1	x_2
0	0
0	1
1	0
1	1



Activation Σ	Current Output Σ > ___
0	0
3	1
1	0
4	1

3. A restaurant table is “available” if the table is **not** occupied and the table top is clean. Select the correct output value to indicate if a table is available for each combination of inputs by filling in one of the two circles.

Inputs		
Occupied	Top is Clean	Predicted Output (0=No, 1=Yes)
0	0	○ 0 ○ 1
0	1	○ 0 ○ 1
1	0	○ 0 ○ 1
1	1	○ 0 ○ 1

4. Now fill in the weights and threshold value to make the neuron determine whether a restaurant table is available.