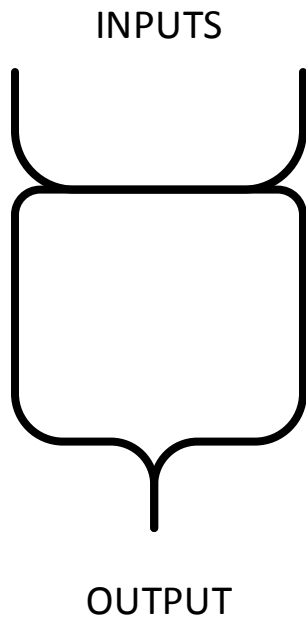


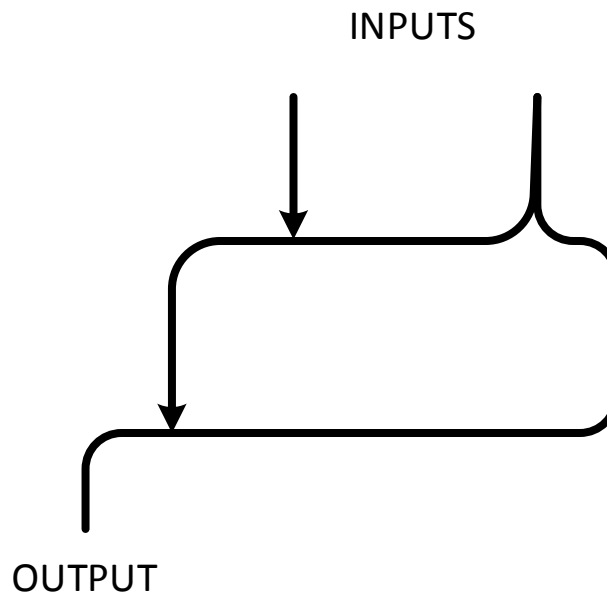
# XOR

Exclusive OR (XOR) is true if the inputs are different and false if they're the same.



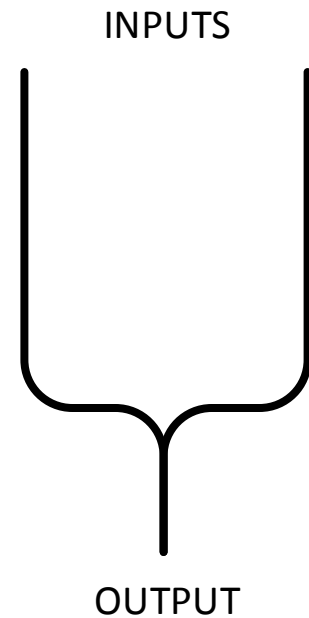
# AND



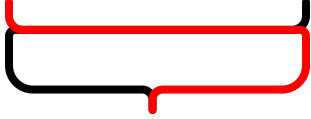
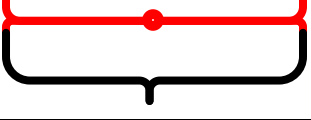
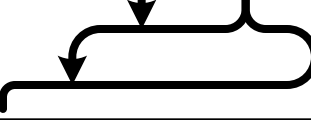
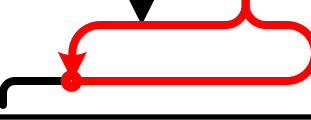
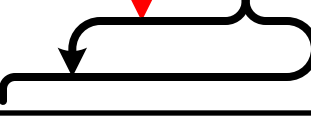


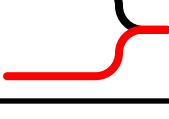


AND is true if the inputs are both true and false if either of them are false.



# OR

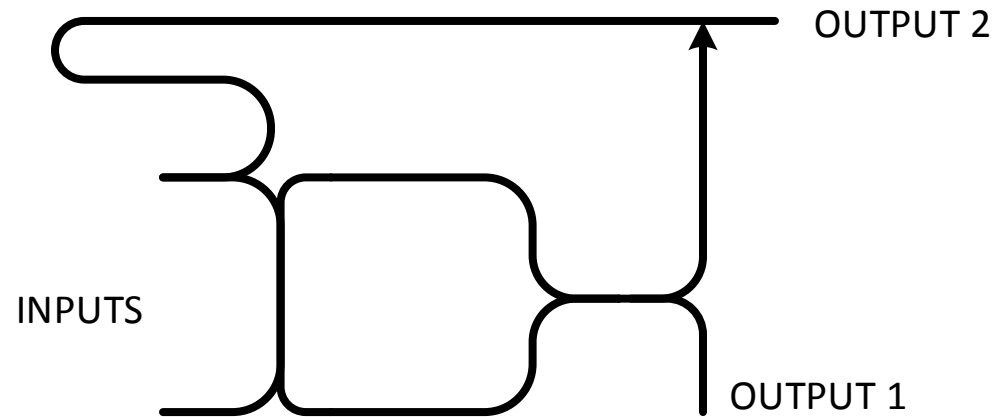
OR is true if any of the inputs are true.



Gate	In 1	In 2	Out	Path
XOR	0	0	0	
	1	0	1	
	0	1	1	
	1	1	0	
AND	0	0	0	
	1	0	0	
	0	1	0	
	1	1	1	
OR	0	0	0	
	1	0	1	
	0	1	1	
	1	1	1	

# Half Adder

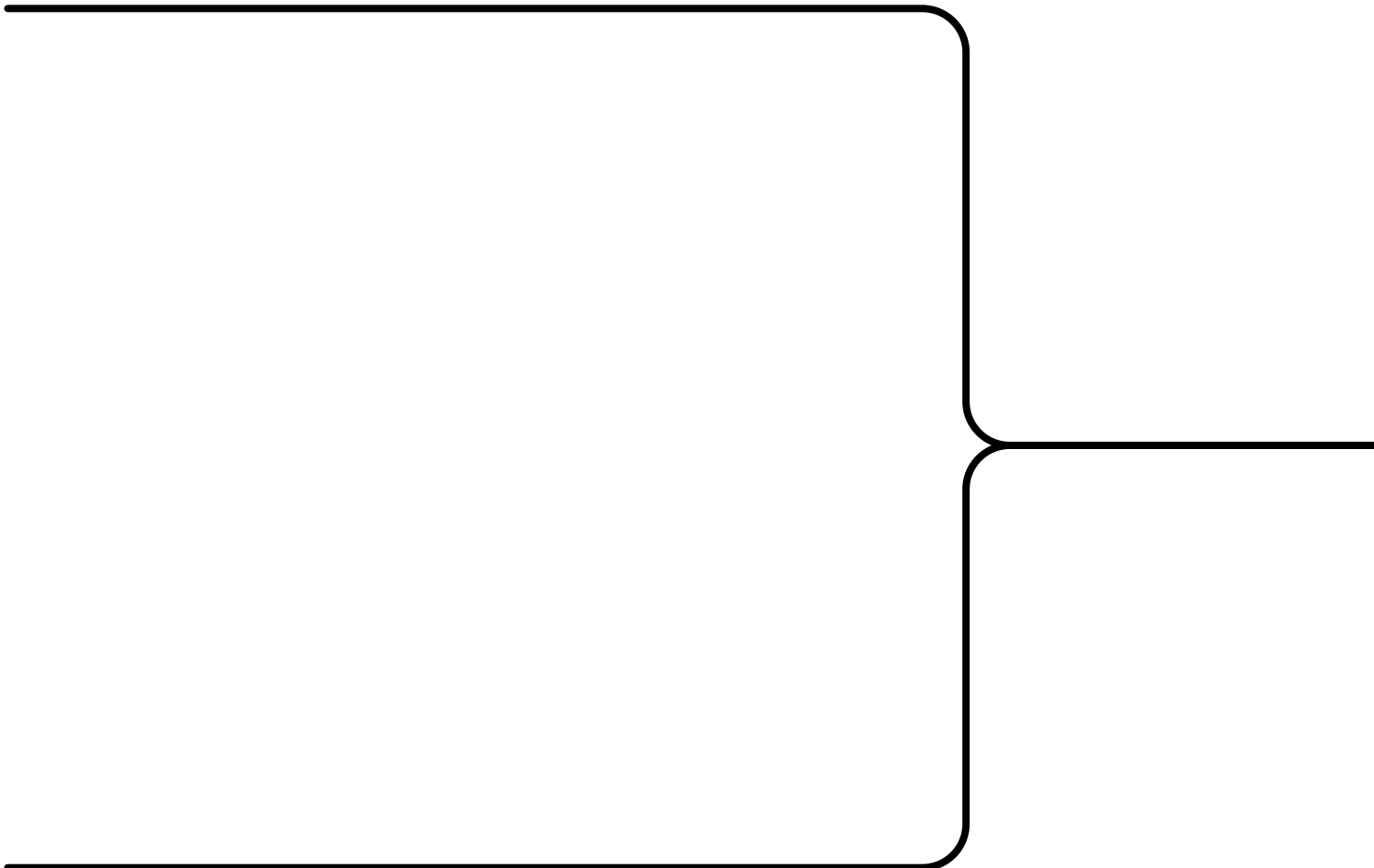
Takes two numbers. Output 1 is the sum of the numbers at the bit position. Output two is the bit to carry to the next position



INPUTS

OR GATE

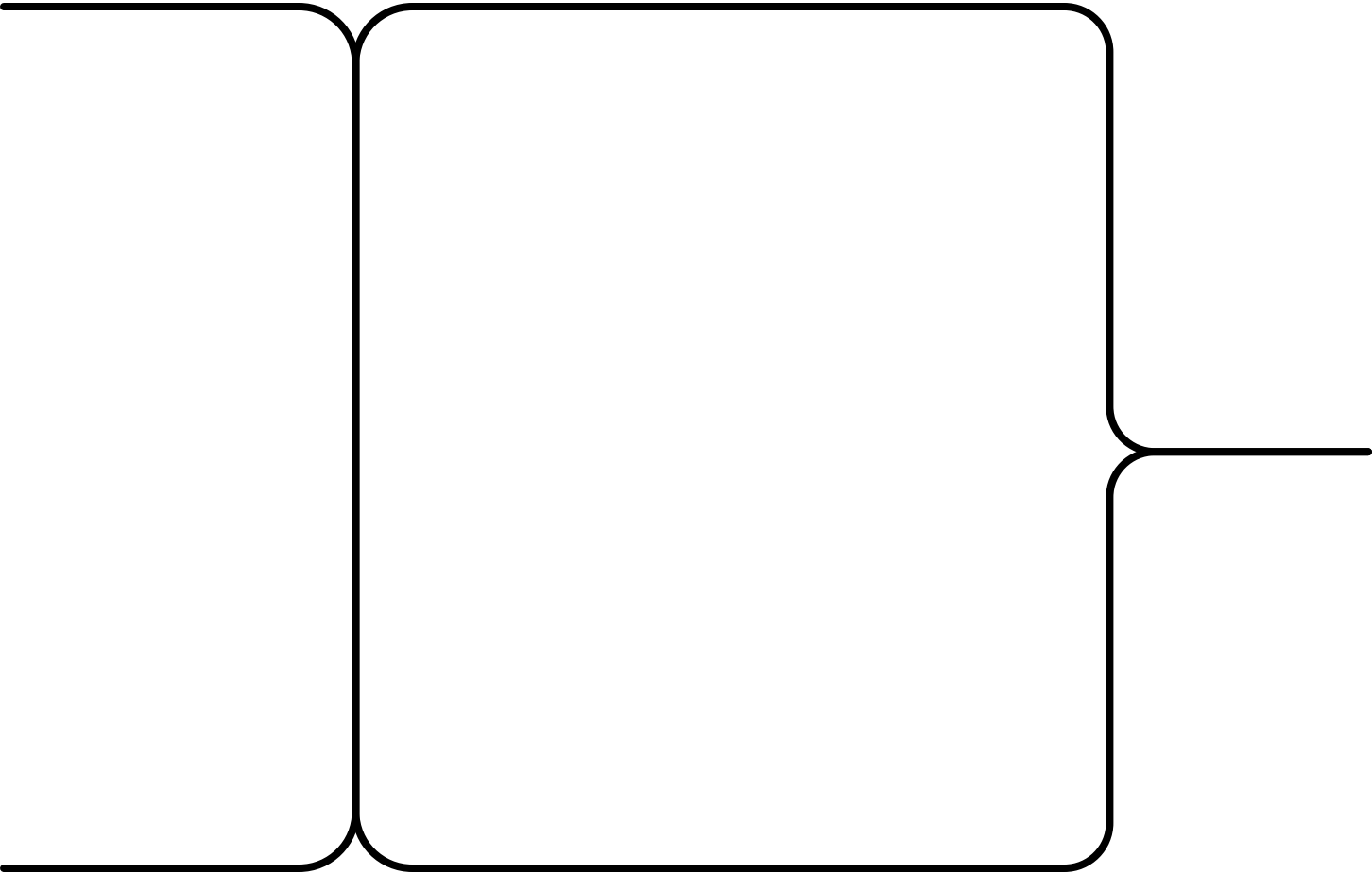
OUTPUT



XOR GATE

INPUTS

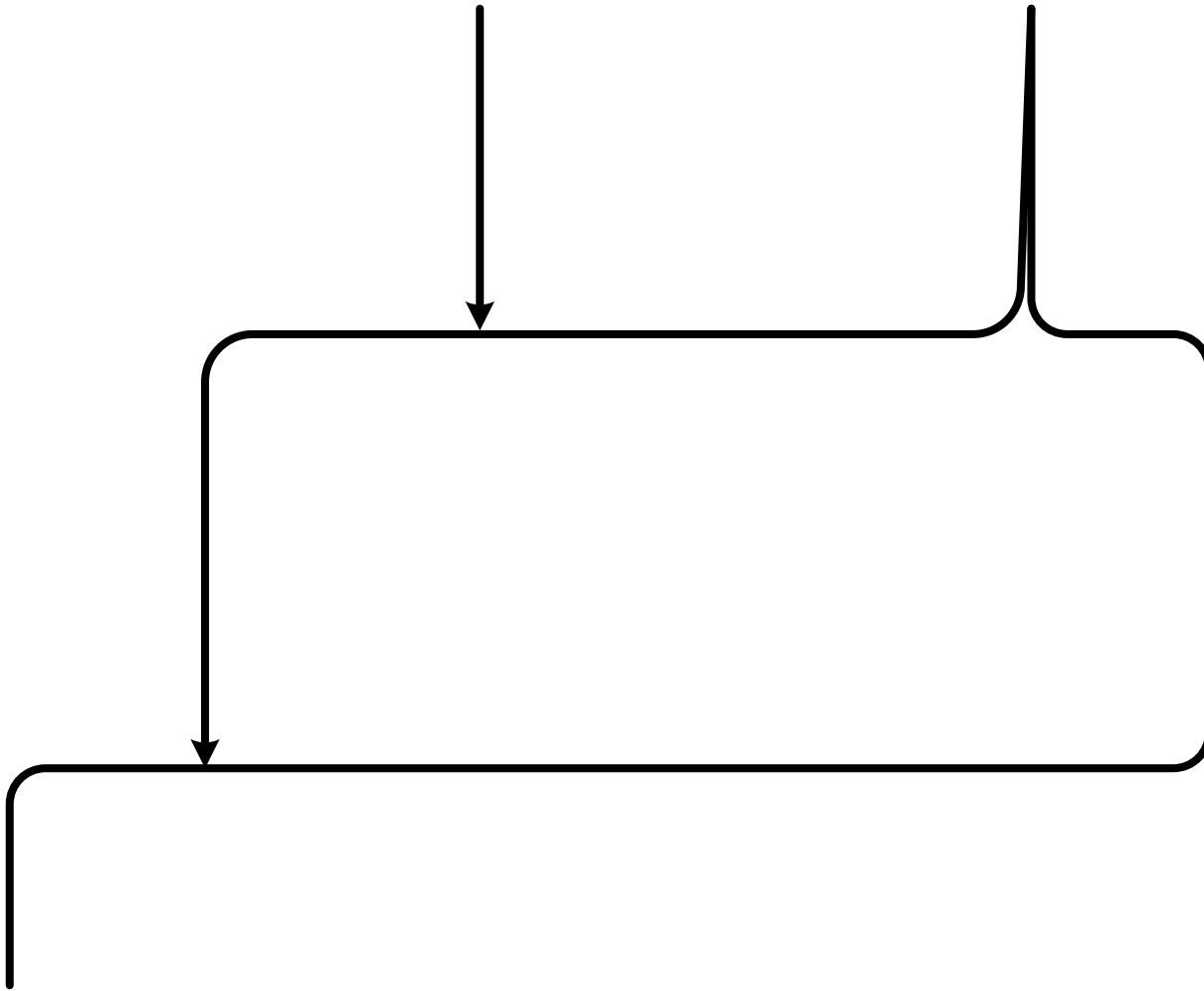
OUTPUT



AND GATE

INPUTS

OUTPUT

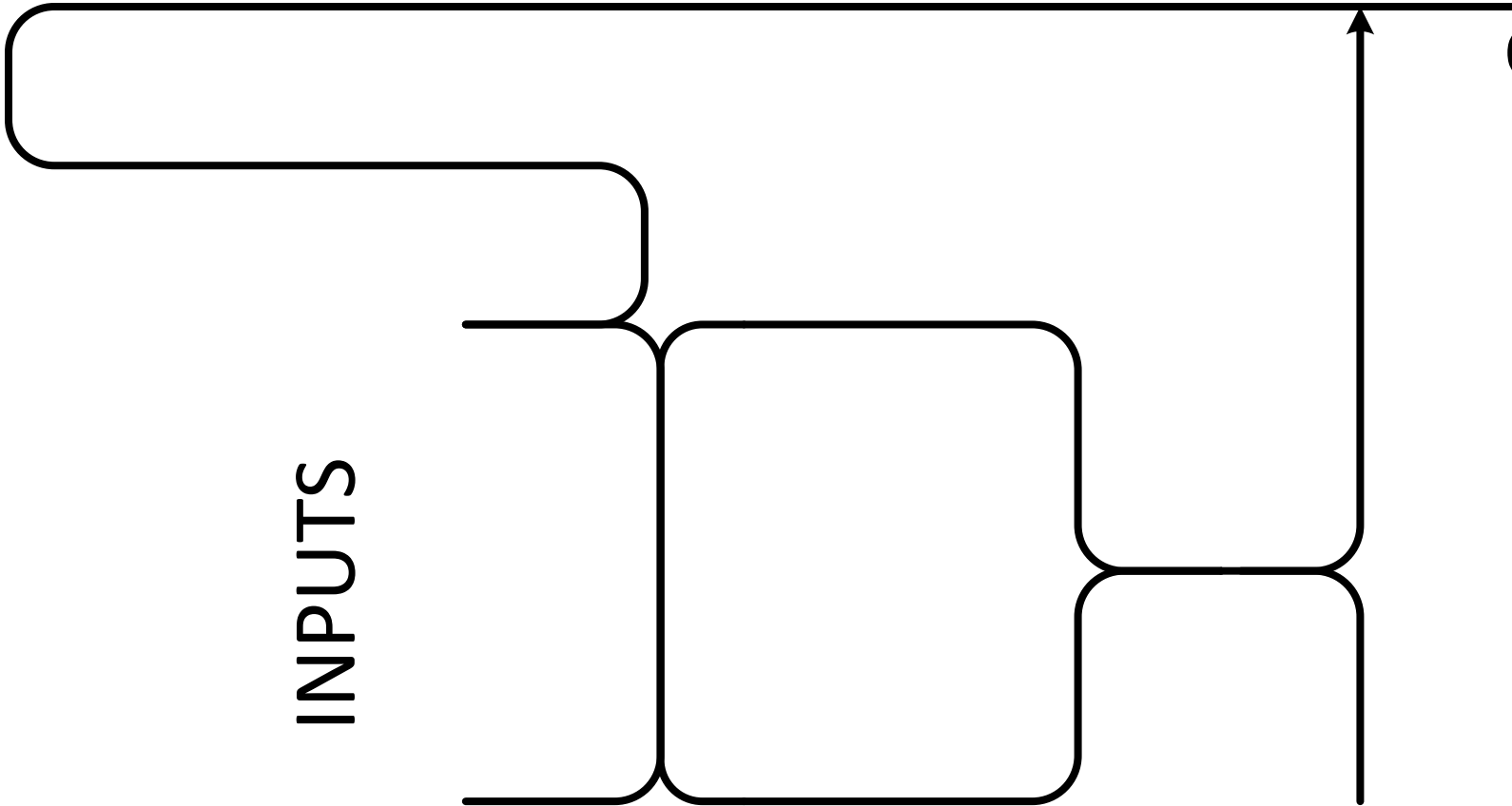


HALF ADDER

INPUTS

OUTPUT 2

OUTPUT 1





# FULL ADDER

