AND Gate

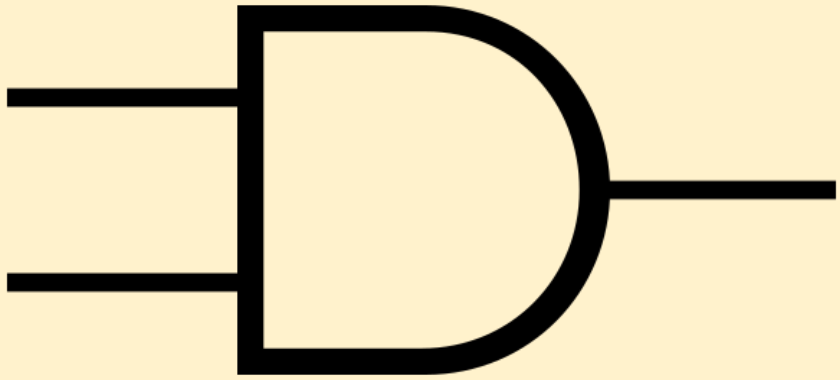
1 = True
0 = False

In an **AND** gate, **both** inputs need to be True to get an output of True

A	B	Q
0	0	
0	1	
1	0	
1	1	

A AND B

A . B



OR Gate

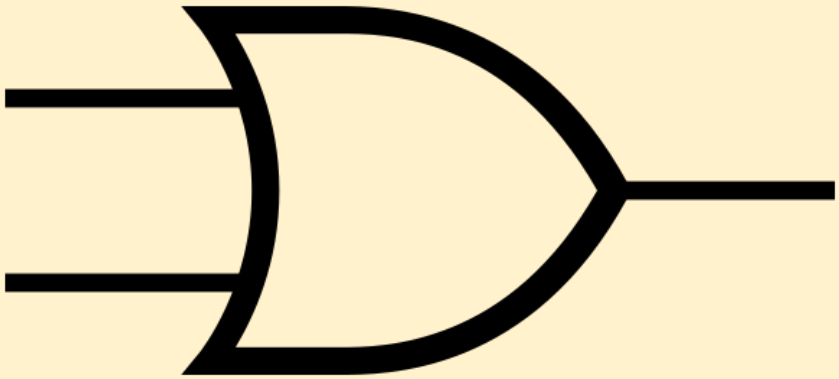
1 = True
0 = False

In an **OR** gate, **one or more** of the inputs need to be True to get an output of True

A	B	Q
0	0	
0	1	
1	0	
1	1	

A OR B

A + B



XOR Gate

1 = True
0 = False

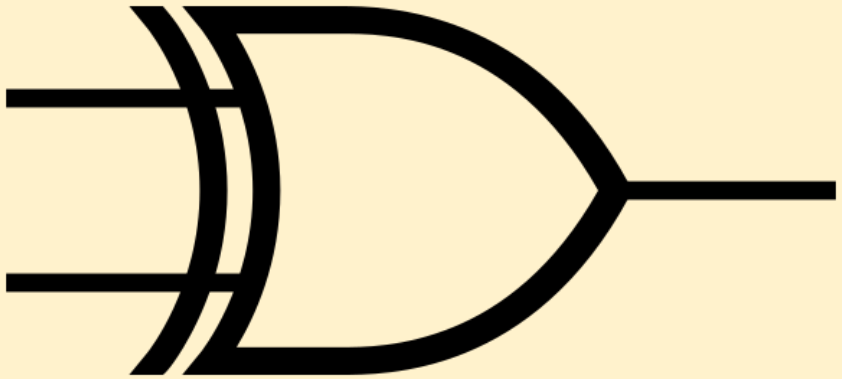
In an **XOR** gate, **one <u>but only one</u>** of the inputs needs to be True to get an output of True

XOR stands for **Exclusive OR**

A	B	Q
0	0	
0	1	
1	0	
1	1	

A XOR B

$A \oplus B$



NOT Gate

1 = True
0 = False

NOT gates only have one input

They switch the input to the opposite - so True becomes False and vice-versa

A	Q
0	
1	

NOT A

$\overline{A}$