Boolean Algebra

Boolean Arithmetic

0 meaning open and 1 meaning closed

0 + 0 =0

0 +1 = 1

1+ 0 = 1

1 + 1 = 1

OR Gate

Boolean Addition corresponds to an OR Gate

0 + 0 =0

0 +1 = 1

1+ 0 = 1

1 + 1 = 1

AND Gate

Boolean Multiplication corresponds to an AND GATE

0 X 0 = 0

0 X 1 = 0

1 X 0 = 0

1 X 1 = 1

NOT Gate

Boolean complementation is equivalent to the NOT logic function

If A =1

Then = 0

If A = 0

Then = 1

References:

<https://www.allaboutcircuits.com/textbook/digital/chpt-7/boolean-arithmetic/>