

Truth Table

A	B	C	F(A,B,C)	AND/OR Circuit	NAND Circuit
0	0	0	0	0	0
0	0	1	1	1	1
0	1	0	0	0	0
0	1	1	1	1	1
1	0	0	1	1	1
1	0	1	1	1	1
1	1	0	0	0	0
1	1	1	1	1	1

Explanation: This truth table shows that the AND/OR circuit and the NAND circuit are the same because their outputs are exactly the same. Since their outputs are exactly the same, they are logically equivalent. Without looking inside to see the circuit, a person would not know if it was an AND/OR circuit or a NAND circuit because they are the same.