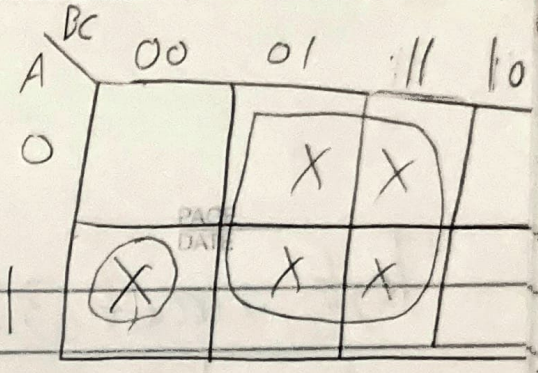
1-

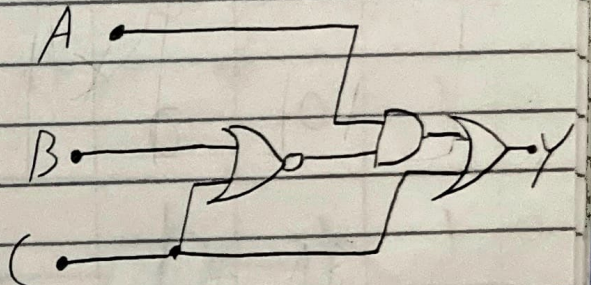
A	B	C	Y
0	0	0	0
0	0	1	1
0	1	0	0
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	0
1	1	1	1

Test circuit 1

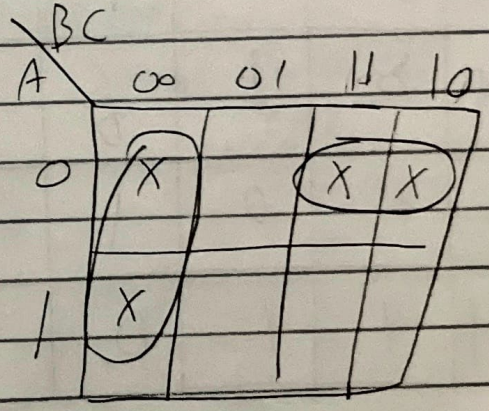


$F(A,B,C) = (A\bar{B}\bar{C} + C)$

$= (A(\overline{B+C}) + C)$



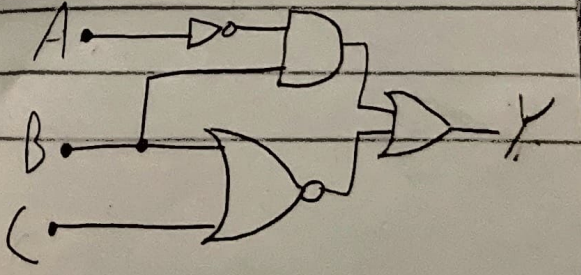
A	B	C	Y
0	0	0	1
0	0	1	0
0	1	0	1
0	1	1	1
1	0	0	1
1	0	1	0
1	1	0	0
1	1	1	0



$F(A,B,C) = \bar{B}\bar{C} + \bar{A}B$

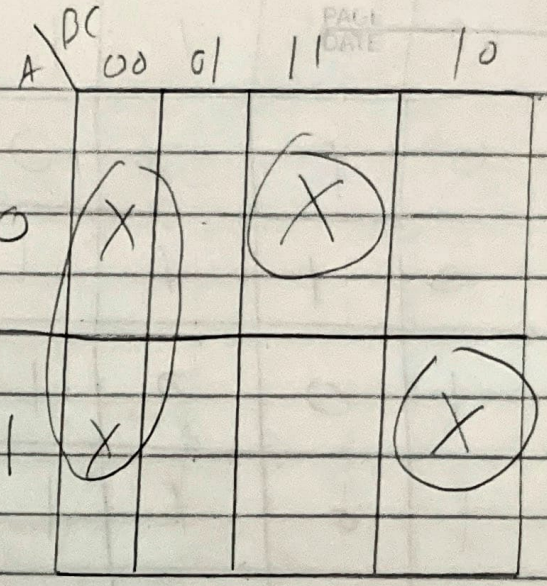
$= (\overline{B+C}) + \bar{A}B$

Test circuit 2



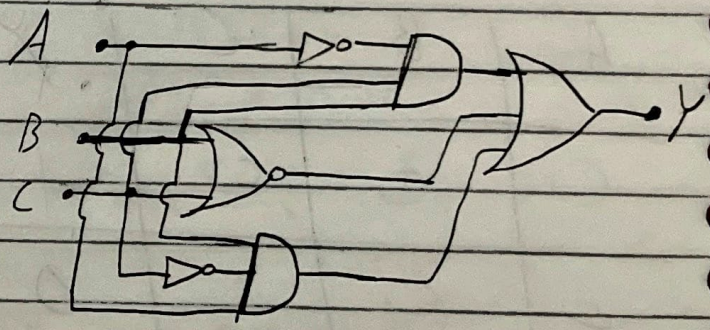
Test circuit 3

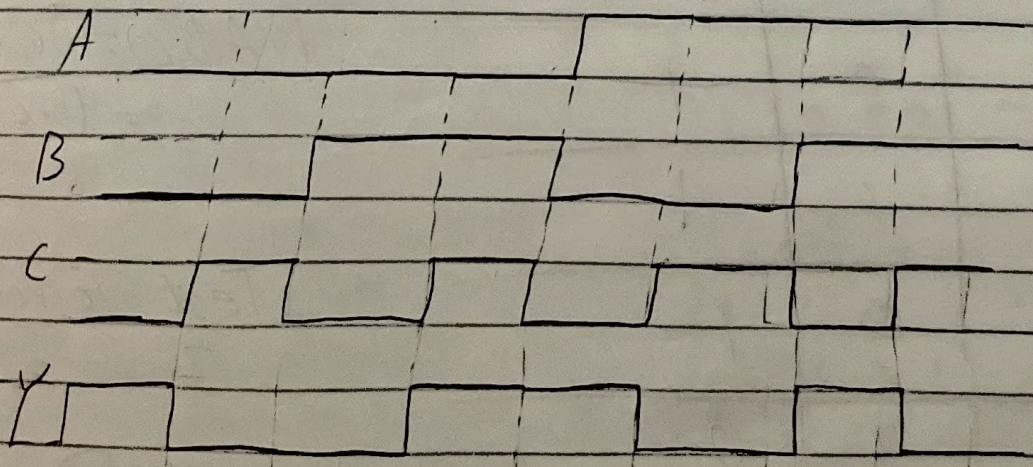
A	B	C	Y
0	0	0	1
0	0	1	0
0	1	0	0
0	1	1	1
1	0	0	1
1	0	1	0
1	1	0	1
1	1	1	0



$\bar{B}\bar{C} + \bar{A}\bar{B}C + A\bar{B}C$

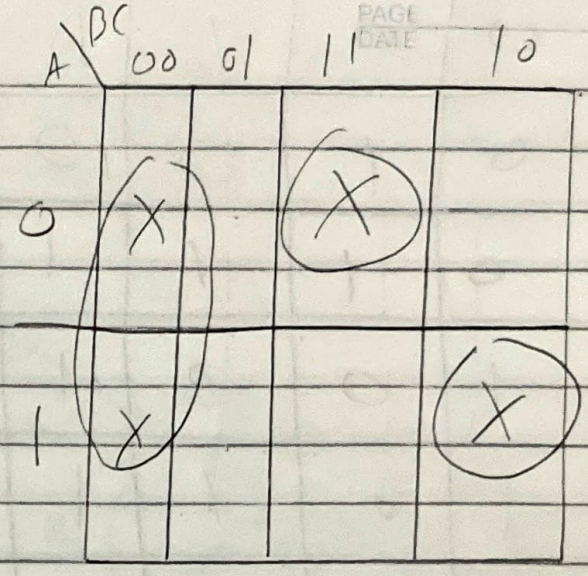
$\overline{(B+C)} + \bar{A}\bar{B}C + A\bar{B}\bar{C}$





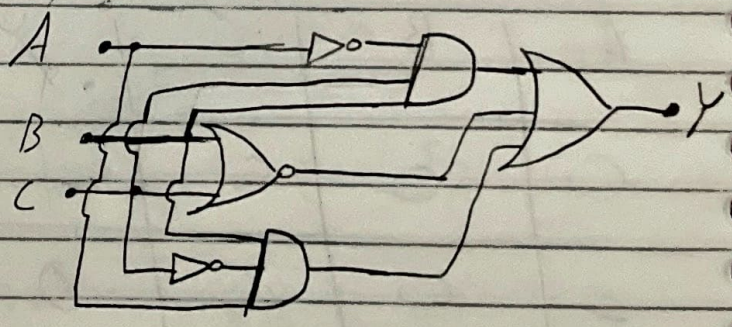
Test circuit 3

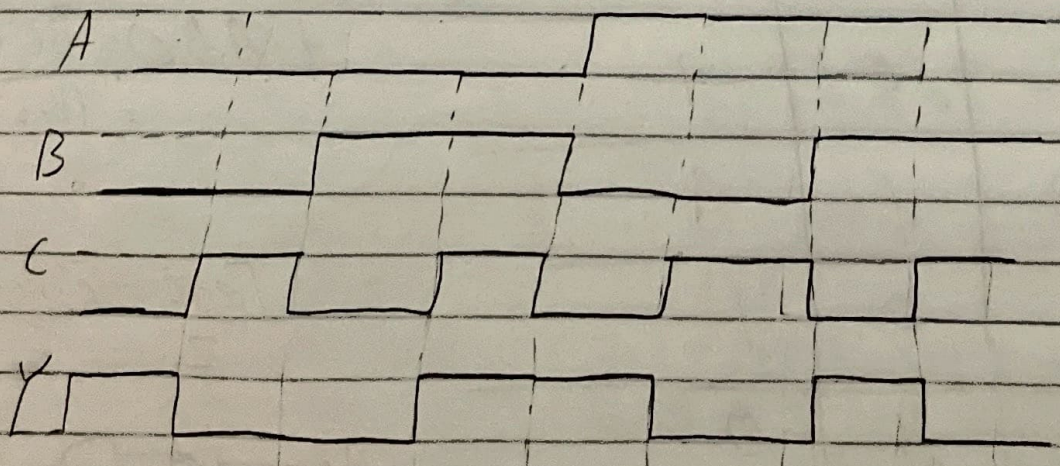
A	B	C	Y
0	0	0	1
0	0	1	0
0	1	0	0
0	1	1	1
1	0	0	1
1	0	1	0
1	1	0	1
1	1	1	0



$\bar{B}\bar{C} + \bar{A}BC + A\bar{B}\bar{C}$

$\overline{(B+C)} + \bar{A}BC + A\bar{B}\bar{C}$

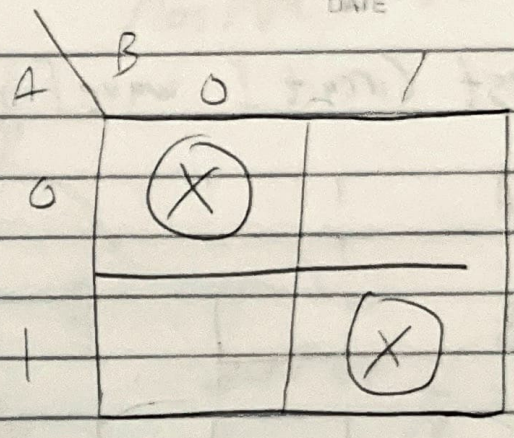




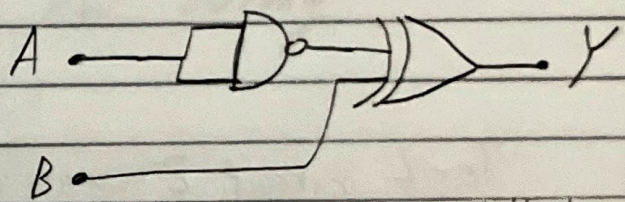
PAGE
DATE

Test circuit 4

A	B	Y
0	0	1
0	1	0
1	0	0
1	1	1

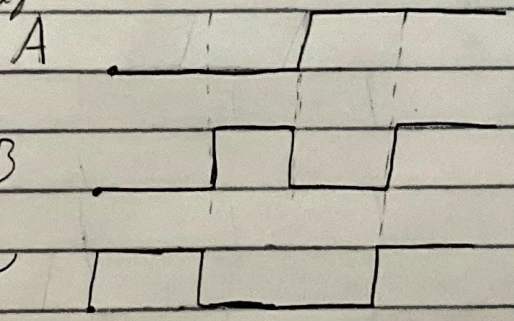


$\bar{a}\bar{b} + ab$



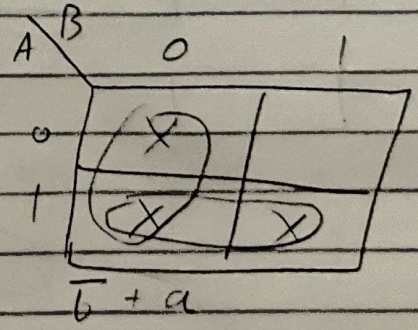
can be remodelled to XNOR

Wave diagram

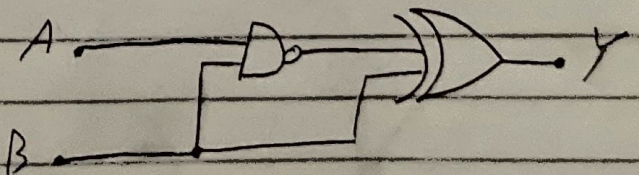


Test circuit 5

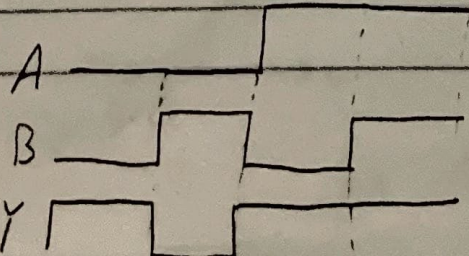
A	B	Y
0	0	1
0	1	0
1	0	1
1	1	1



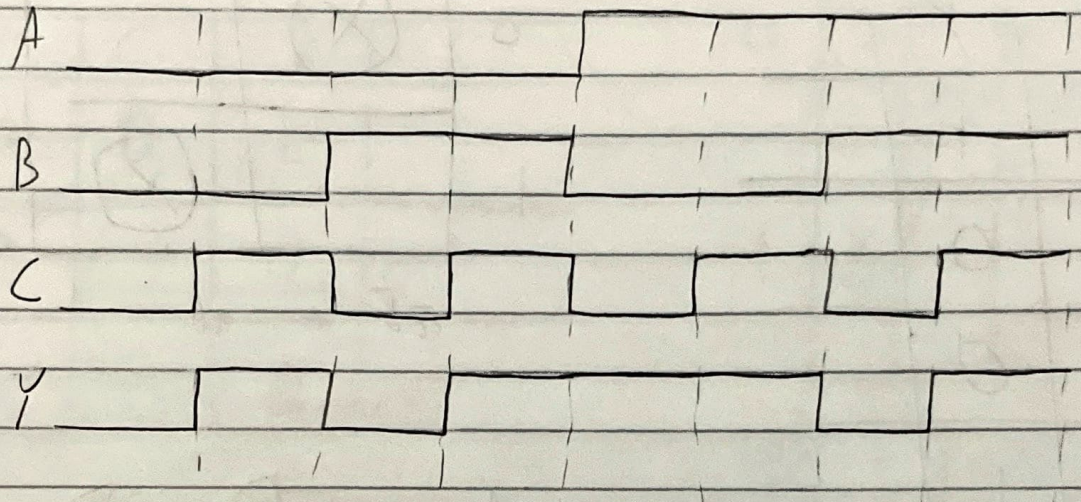
$\bar{b} + a$



Wave diagram



Test Circuit 1 waveform



Test circuit 2 waveform