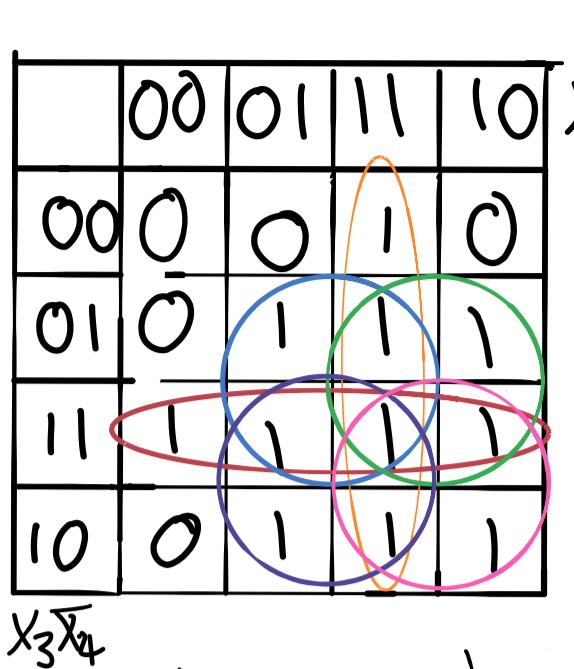


Schaltnetze B)

1.1)

X_1	\bar{X}_2	X_3	\bar{X}_4	y
0	0	0	0	0
0	0	0	1	0
0	0	1	0	0
0	0	1	1	1
0	1	0	0	0
0	1	0	1	1
0	1	1	0	1
0	1	1	1	1
1	0	0	0	0
1	0	0	1	1
1	0	1	0	1
1	0	1	1	1
1	1	0	0	1
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1



$$(X_1 \wedge \bar{X}_2) \vee (X_3 \wedge \bar{X}_4) \vee \\ (\bar{X}_2 \wedge \bar{X}_4) \vee (X_1 \wedge \bar{X}_4) \vee \\ (X_3 \wedge \bar{X}_2) \vee (X_1 \wedge X_3)$$

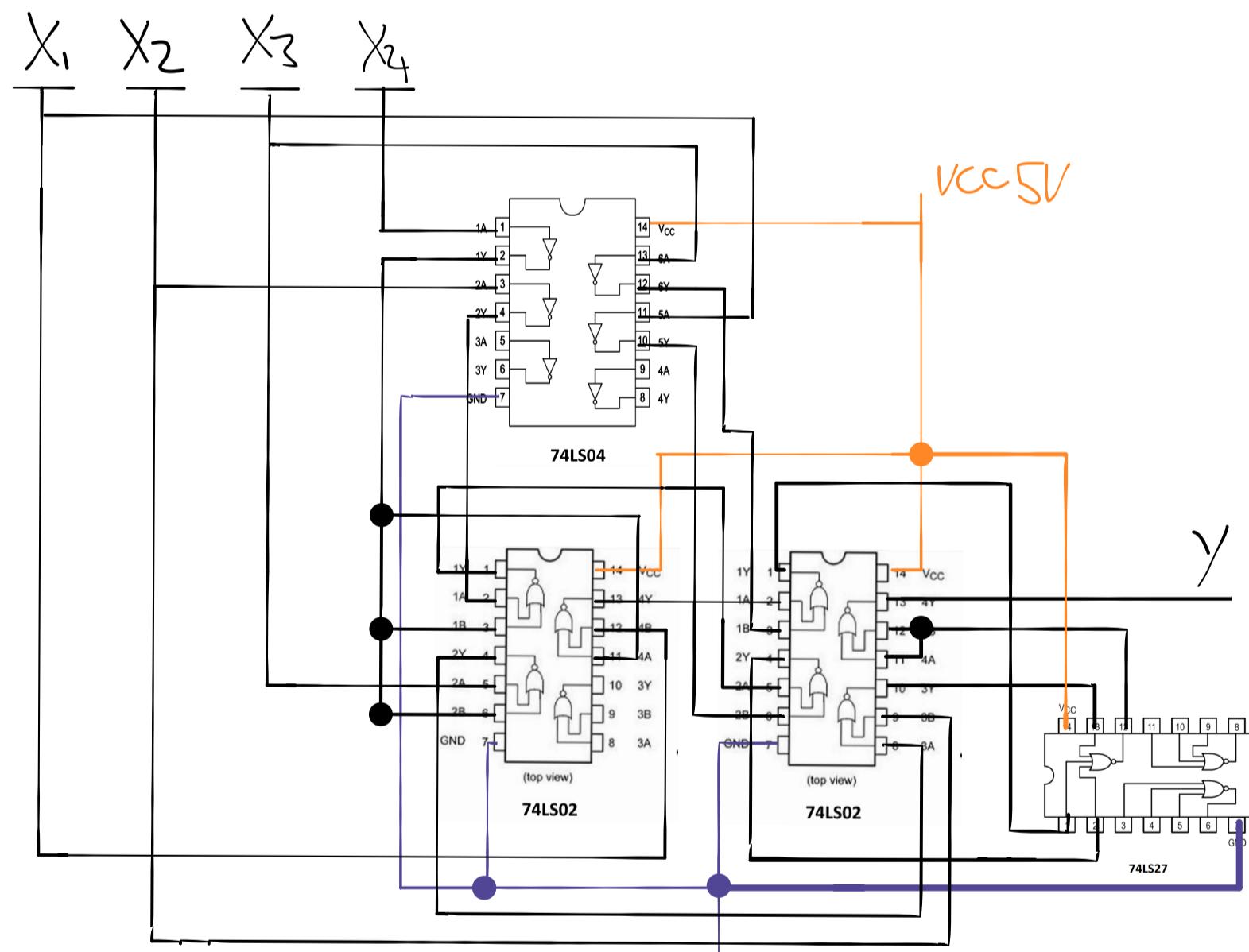
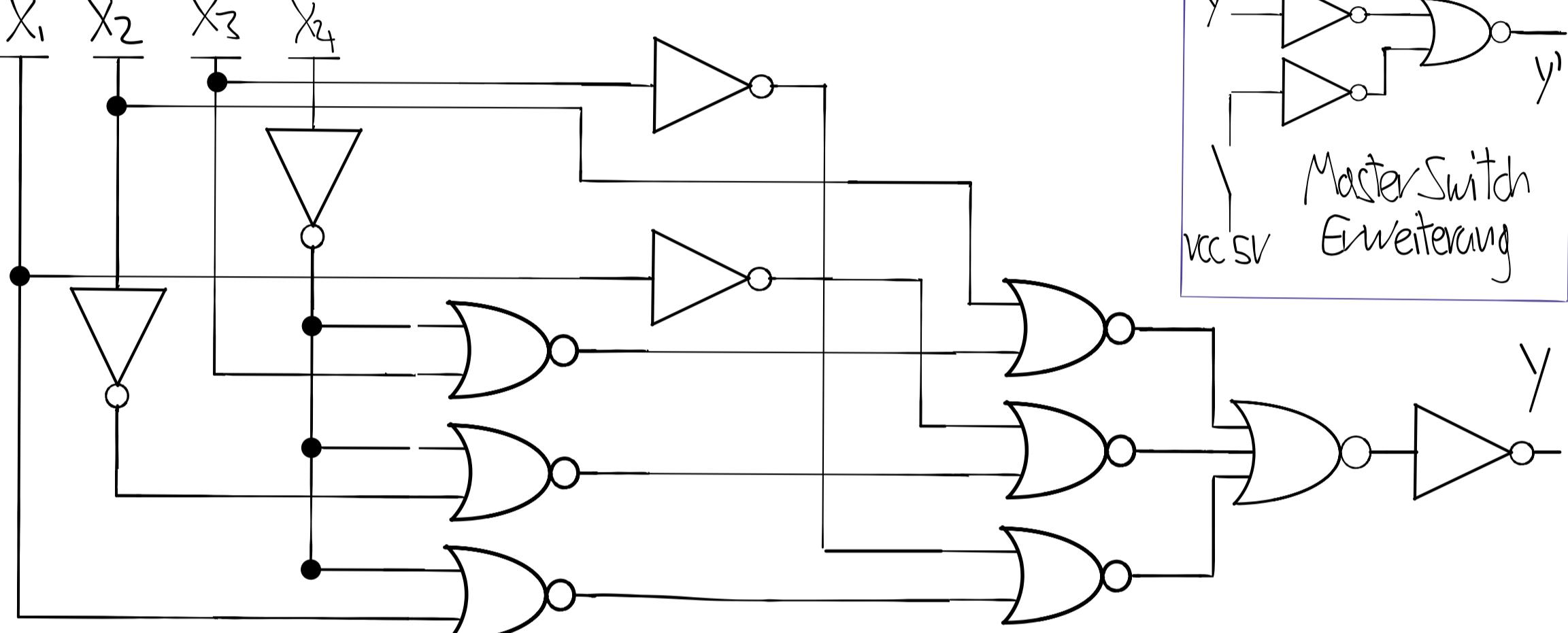
Distributiv Gesetz

$$(X_1 \wedge (\bar{X}_2 \vee \bar{X}_4)) \vee (\bar{X}_2 \wedge (X_3 \vee \bar{X}_4)) \vee (X_3 \wedge (X_1 \vee \bar{X}_4))$$

$$(\bar{X}_1 \vee (\bar{X}_2 \vee \bar{X}_4)) \vee (X_2 \vee (X_3 \vee \bar{X}_4)) \vee (\bar{X}_3 \vee (X_1 \vee \bar{X}_4)) \quad \text{De Morgan}$$

$$(\bar{X}_1 \downarrow (\bar{X}_2 \downarrow \bar{X}_4)) \vee (X_2 \downarrow (X_3 \downarrow \bar{X}_4)) \vee (\bar{X}_3 \downarrow (X_1 \downarrow \bar{X}_4)) \quad \downarrow \text{NOR}$$

1.2)



1.3)

