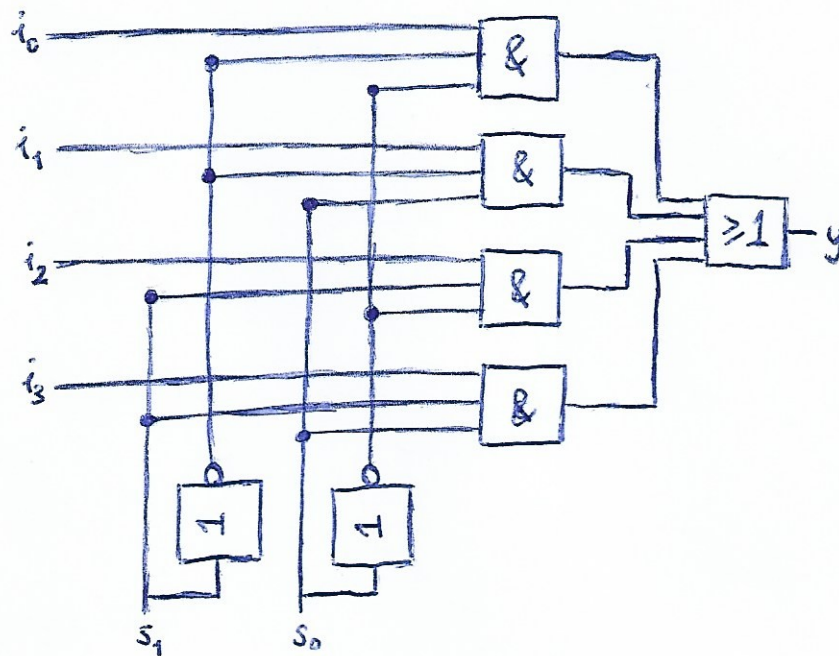
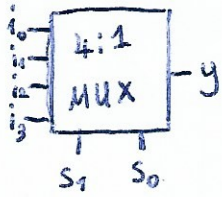


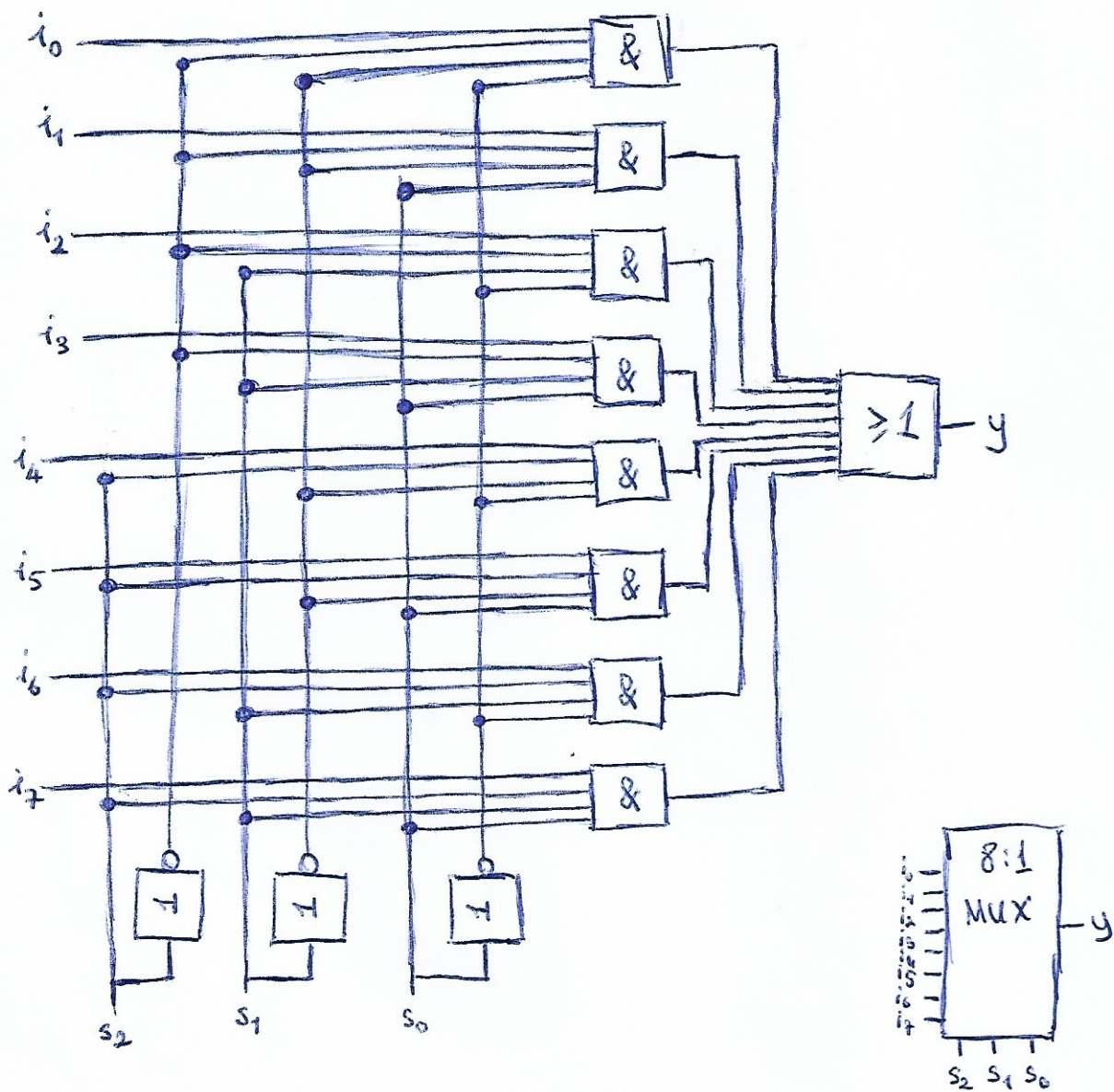
Aufgabe 4.1

d.



Aufgabe 4.1

C.



Aufgabe 4.1

e. $Y = (A \wedge B \wedge C) \vee (A \wedge B \wedge \bar{C}) \vee (A \wedge \bar{B} \wedge C)$

$$= ((A \wedge B) \wedge (C \vee \bar{C})) \vee (A \wedge \bar{B} \wedge C) \Leftrightarrow \text{Distributivität}$$

$$= ((A \wedge B) \wedge 1) \vee (A \wedge \bar{B} \wedge C) \Leftrightarrow \text{Komplementarität}$$

$$= (A \wedge B) \vee (A \wedge \bar{B} \wedge C) \Leftrightarrow \text{Neutralität}$$

$$= A \wedge (B \vee (\bar{B} \wedge C)) \Leftrightarrow \text{Distributivität}$$

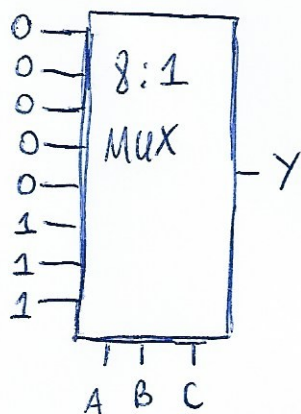
$$= A \wedge ((B \vee \bar{B}) \wedge (B \vee C)) \Leftrightarrow \text{Komplementarität}$$

$$= A \wedge (1 \wedge (B \vee C)) \Leftrightarrow \text{Neutralität}$$

$$= A \wedge (B \vee C) \Leftrightarrow \text{Distributivität}$$

$$= (A \wedge B) \vee (A \wedge C)$$

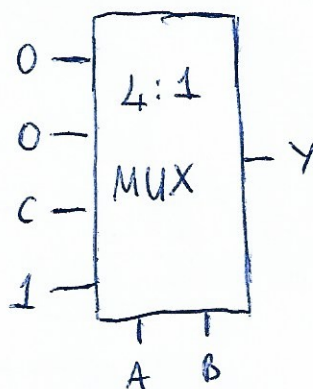
f.



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

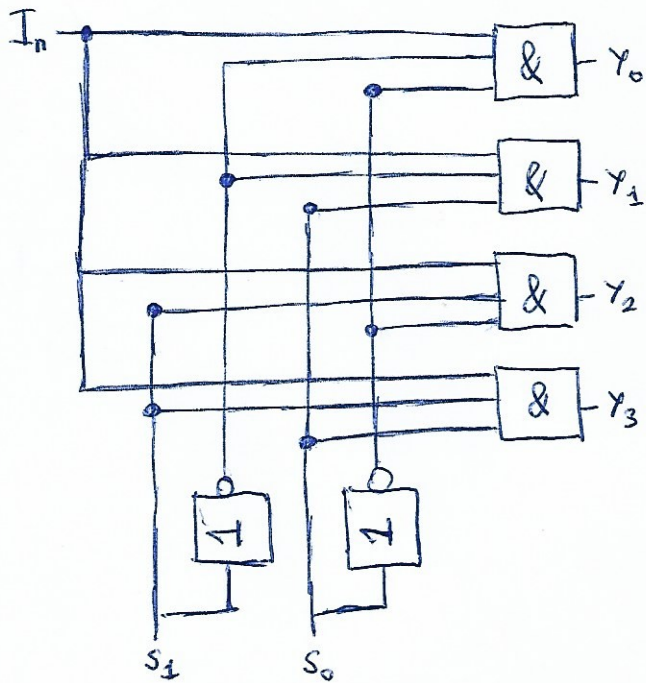
h.

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



Aufgabe 4.2

a.

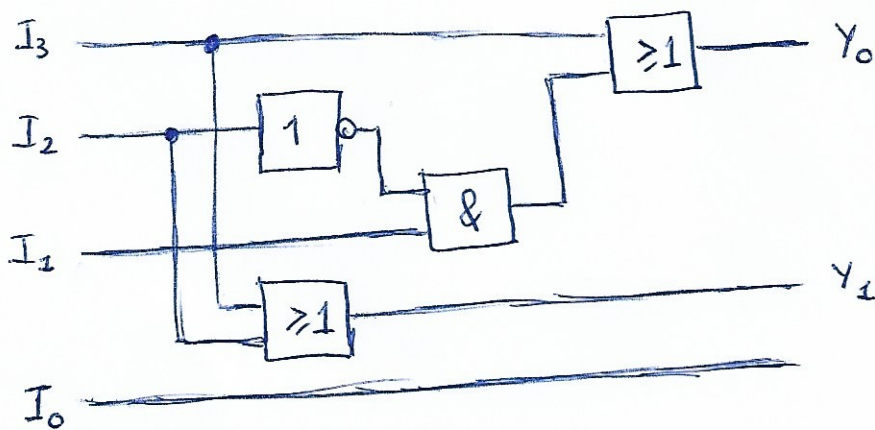


$$Y_0 = \overline{S_1} \wedge \overline{S_0} \wedge I \quad Y_2 = S_1 \wedge \overline{S_0} \wedge I$$

$$Y_1 = \overline{S_1} \wedge S_0 \wedge I \quad Y_3 = S_1 \wedge S_0 \wedge I$$

Aufgabe 4.3

a.

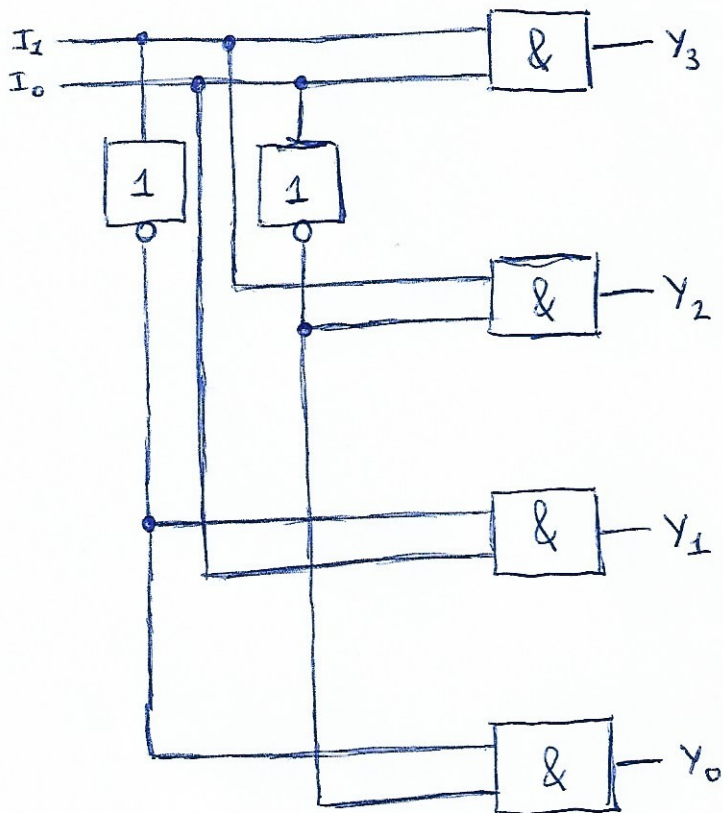


$$Y_1 = I_3 \vee I_2$$

$$Y_0 = I_3 \vee \overline{I_2} \wedge I_1$$

Aufgabe 4.3

C.



$$Y_3 = I_1 \wedge I_0$$

$$Y_2 = I_1 \wedge \overline{I_0}$$

$$Y_1 = \overline{I_1} \wedge I_0$$

$$Y_0 = \overline{I_1} \wedge \overline{I_0}$$