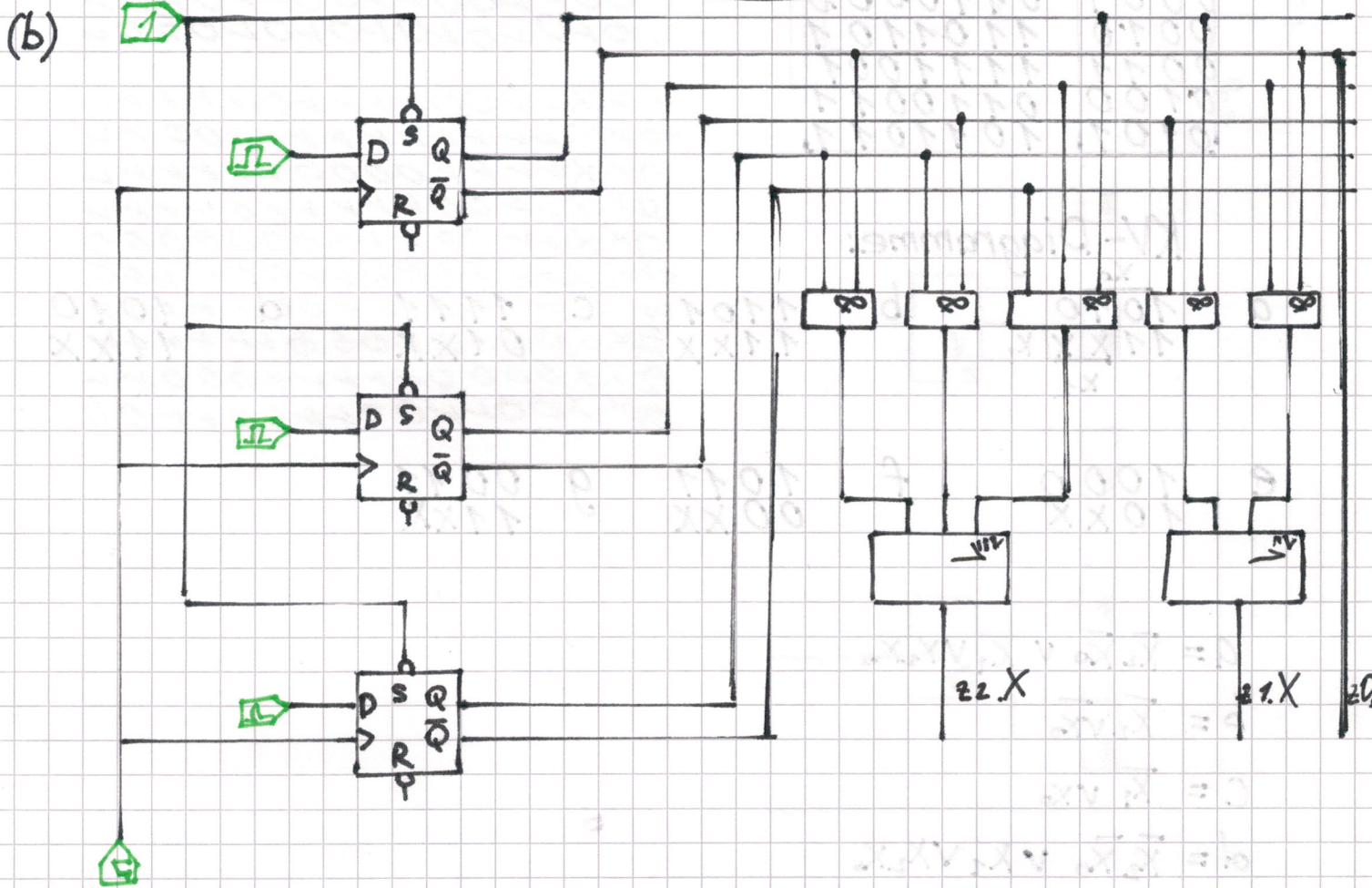
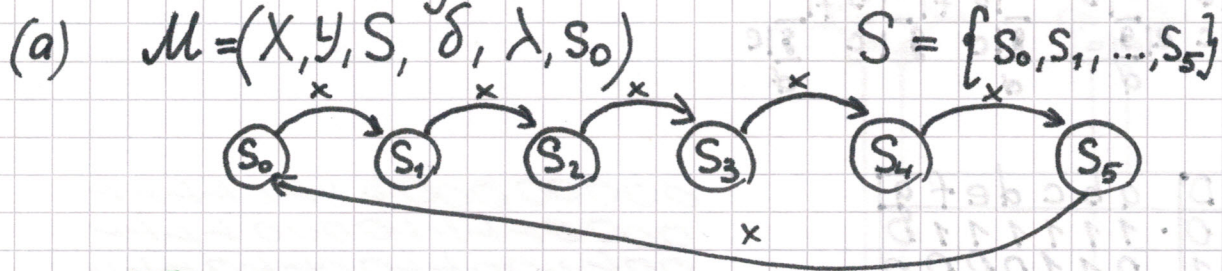


Versuch 3

Aufgabe 1. Binärzähler



	z2.X	z1.X	z0.X
00 00	X	X	X
00 01	0	0	1
00 10	0	0	1
00 11	0	1	0
01 00	0	1	0
01 01	0	1	1
01 10	0	1	1
01 11	1	0	0
10 00	1	0	0
10 01	1	0	1
10 10	1	0	1
10 11	1	1	0
11 00	1	1	0
11 01	1	1	1

→ 1110 | 1 | 1 | 1
1111 | 0 | 0 | 0

(c)

a
g b
f c
e d

man braucht:

$\frac{a}{f} b$	$b \frac{a}{c}$	$\frac{a}{e} d$	$\frac{a}{g} c$	$f \frac{a}{b} c$	$f \frac{a}{g} c$
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A	B	C	D	a	b	c	d	e	f	g
0	0	0	0	1	1	1	1	1	1	0
0	0	0	1	0	1	1	0	0	0	0
0	0	1	0	1	1	0	1	1	0	1
0	0	1	1	1	1	1	1	0	0	1
0	1	0	0	0	1	1	0	0	1	1
0	1	0	1	1	0	1	1	0	1	1

KV-Diagramme:

a	$\frac{x_0}{1010}$ $11 \underline{xx} x_1$ x_2	b	1101 $11xx$	c	1111 $01xx$	d	1010 $11xx$
e	1000 $10xx$	f	1011 $00xx$	g	0011 $11xx$		

$$a = \bar{x}_2 \bar{x}_0 \vee x_1 \vee x_2 x_0$$

$$b = \bar{x}_2 \vee \bar{x}_0$$

$$c = \bar{x}_1 \vee x_0$$

$$d = \bar{x}_2 \bar{x}_0 \vee x_1 \vee x_2 x_0$$

$$e = \bar{x}_2 x_0$$

$$f = \bar{x}_1 \bar{x}_0 \vee x_2$$

$$g = x_1 \vee x_2$$

