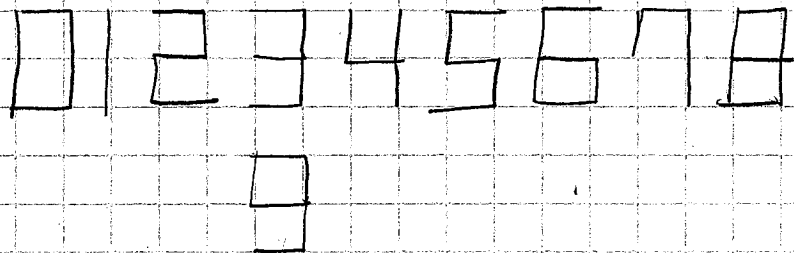


	A	B	C	D		A	B	C	D	E	F	G
	1	2	3	4		1	2	3	4	5	6	7
0	0	0	0	0		1	1	1	1	1	1	0
1	0	0	0	1		0	1	1	0	0	0	0
2	0	0	1	0		1	1	0	1	1	0	1
3	0	0	1	1		1	1	1	1	0	0	1
4	0	1	0	0		0	1	1	0	0	1	1
5	0	1	0	1		1	0	1	1	0	1	1
6	0	1	1	0		1	0	1	1	1	1	1
7	0	1	1	1		1	1	1	0	0	X	0
8	1	0	0	0		1	1	1	1	1	1	1
9	1	0	0	1		1	1	1	X	0	1	1
10	1	0	1	0		1	1	1	0	1	1	1
11	1	0	1	1		0	0	1	1	1	1	1
12	1	1	0	0		1	0	0	1	1	1	0
13	1	1	0	1		0	1	1	1	1	0	1
14	1	1	1	0		1	0	0	1	1	1	1
15	1	1	1	1		1	0	0	0	1	1	1

Don't care



①

AB \ CD	00	01	11	10
00	1	0	X	1
01	0	1	X	1
11	1	1	X	1
10	1	1	X	1

$$\textcircled{A} = A + C + BD + \overline{B}\overline{D}$$

②

AB \ CD	00	01	11	10
00	1	1	X	1
01	1	0	X	1
11	1	1	X	X
10	1	0	X	X

$$\textcircled{B} = A + C + \overline{B} + \overline{C}\overline{D}$$

$$A + C + \overline{B} + D$$

③

AB \ CD	00	01	11	10
00	1	1	X	1
01	1	1	X	1
11	1	1	X	X
10	0	1	X	X

$$\textcircled{C} = A + \overline{C} + D + B$$

④

AB \ CD	00	01	11	10
00	1	0	X	1
01	0	1	X	0
11	1	0	X	X
10	1	1	X	X

$$\textcircled{D} = AC + AB + \overline{B}C + C\overline{D} + \overline{B}\overline{D} + \overline{A}B\overline{C}\overline{D}$$

⑤

AB \ CD	00	01	11	10
00	1	0	X	1
01	0	0	X	0
11	0	0	X	X
10	1	1	X	X

$$\textcircled{E} = AC + C\overline{D} + AB + \overline{B}\overline{D}$$

⑥

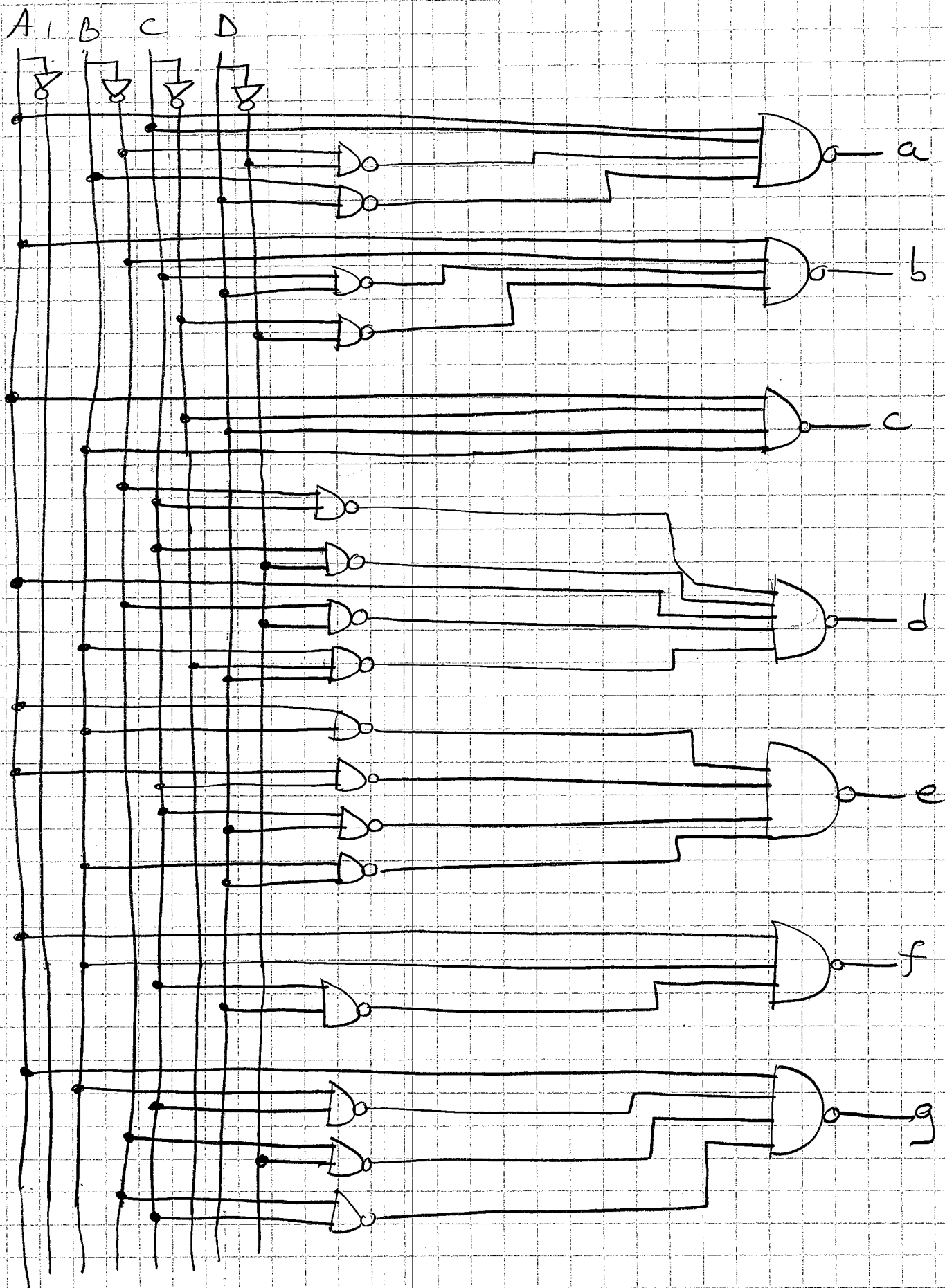
AB \ CD	00	01	11	10
00	1	1	X	1
01	0	1	X	1
11	0	0	X	X
10	0	1	X	X

$$\textcircled{F} = A + B\overline{D} + B\overline{C} + \overline{C}\overline{D}$$

⑦

AB \ CD	00	01	11	10
00	0	1	X	1
01	0	1	X	1
11	1	0	X	X
10	1	1	X	X

$$\textcircled{G} = A + C\overline{D} + \overline{B}C + B\overline{C}$$



AB \ CD	00	01	11	10
00	1	0	1	1
01	0	1	1	1
11	1	1	1	1
10	1	1	1	1

$$A + C + BD + \bar{B}\bar{D} \checkmark$$

AB \ CD	00	01	11	10
00	1	1	1	1
01	1	0	1	1
11	1	1	1	1
10	1	0	1	1

~~$$A + C + \bar{C}\bar{D} + CD \checkmark$$~~

$$\bar{A} + CD + \bar{B} + \bar{C}\bar{D} \checkmark$$

AB \ CD	00	01	11	10
00	1	1	1	1
01	1	1	1	1
11	1	1	1	1
10	0	1	1	1

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

AB \ CD	00	01	11	10
00	1	0	1	1
01	0	1	1	1
11	1	0	1	1
10	1	1	1	1

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

AB \ CD	00	01	11	10
00	1	0	1	1
01	0	0	1	0
11	0	0	1	1
10	1	1	1	1

$$AB + AC + C\bar{D} + \bar{B}\bar{D}$$

AB \ CD	00	01	11	10
00	1	1	1	1
01	0	1	1	1
11	0	1	1	1
10	0	1	1	1

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

AB \ CD	00	01	11	10
00	0	1	1	1
01	0	1	1	1
11	1	0	1	1
10	1	1	1	1

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

Combo: $\bar{C}\bar{D} \times 2$

Not Combo: $\bar{B}\bar{D} \times 2 \checkmark$

BD

CD

AB

AC

$\bar{B}C \times 2 \checkmark$

$C\bar{D} \times 2 \checkmark$

$B\bar{C}$ used w/ $(B\bar{C})(D) ? \checkmark$

$A+B \times 2 \checkmark$

$A+C \times 2 \checkmark$

$C\bar{D} + \bar{B}\bar{D} \times 2 \checkmark$

