Jawaban UTS Genap TA 2021/2022

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a. Gabar Tabel Kebenaran rangkaian 7 segmen Display.

Display	Input				Output						
	A	B	C	D	a	b	c	d	e	f	g
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	1	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	0	0
8	1	0	0	0	1	1	1	1	1	1	1
9	1	0	0	1	1	1	1	1	0	1	1
A	1	0	1	0	1	1	1	1	1	0	1
B	1	0	1	1	0	0	1	1	1	1	1
C	1	1	0	0	1	0	1	1	1	1	0
D	1	1	0	1	0	1	1	1	1	0	1
E	1	1	1	0	1	0	0	1	1	1	1
F	1	1	1	1	1	0	0	0	1	1	1

b. Gambar K-map untuk keluaran **g** dari rangkaiaan.

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

c. Penyederhanaan representasi dari tabel K-map di jawaba b.

$g = BC' + A + CD' + A'B'C + AB'C$

$g = BC' + A + CD' + (A' + A) B'C$

$g = A + BC' + CD' + B'C$