

Truth Table for  $X = A + (B(A' + C) + C) + AB(D' + E')$

A	B	C	D	E	A'	D'	E'	A' + C	B(A' + C)	B(A' + C) + C	X
0	0	0	0	0	1	1	1	1	0	0	0
0	0	0	0	1	1	1	0	1	0	0	0
0	0	0	1	0	1	0	1	1	0	0	0
0	0	0	1	1	1	0	0	1	0	0	0
0	0	1	0	0	1	1	1	1	0	1	1
0	0	1	0	1	1	1	0	1	0	1	1
0	0	1	1	0	1	0	1	1	0	1	1
0	0	1	1	1	1	0	0	1	0	1	1
0	1	0	0	0	1	1	1	1	1	1	1
0	1	0	0	1	1	1	0	1	1	1	1
0	1	0	1	0	1	0	1	1	1	1	1
0	1	0	1	1	1	0	0	1	1	1	1
0	1	1	0	0	1	1	1	1	1	1	1
0	1	1	0	1	1	1	0	1	1	1	1
0	1	1	1	0	1	0	1	1	1	1	1
0	1	1	1	1	1	0	0	1	1	1	1
1	0	0	0	0	0	1	1	0	0	0	0
1	0	0	0	1	0	1	0	0	0	0	0
1	0	0	1	0	0	0	1	0	0	0	0
1	0	0	1	1	0	0	0	0	0	0	0
1	0	1	0	0	0	1	1	1	0	1	1
1	0	1	0	1	0	1	0	1	0	1	1
1	0	1	1	0	0	0	1	1	0	1	1
1	0	1	1	1	0	0	0	1	0	1	1

1	1	0	0	0	0	1	1	0	0	0
1	1	0	0	1	0	1	0	0	0	0
1	1	0	1	0	0	0	1	0	0	0
1	1	0	1	1	0	0	0	0	0	0
1	1	1	0	0	0	1	1	1	1	1
1	1	1	0	1	0	1	0	1	1	1
1	1	1	1	0	0	0	1	1	1	1
1	1	1	1	1	0	0	0	1	1	1