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Homework #1

Truth Table:

A	B	C	X
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	1
1	0	0	0
1	1	0	1
1	1	1	0

Sum-of-Products representation:

$$X = (!A \ \&\& \ !B \ \&\& \ C) \ || \ (!A \ \&\& \ B \ \&\& \ !C) \ || \ (A \ \&\& \ !B \ \&\& \ !C)$$

Where $!A = \text{NOT}(A)$, $!B = \text{NOT}(B)$, and $!C = \text{NOT}(C)$.