Boolean Algebra Example   3x + 1x = 4x
(A + B).(A + C) = A + (B.C)

LHS
(A + B).(A + C)
= AA + AC + AB + BC
= A + AC + AB + BC
= 1A + AC + AB + BC
= A(1 + C) + AB + BC
= A(1) + AB + BC
= A + AB + BC
= A(1 + B) + BC
= A(1) + BC
= A + BC