2B.

a) $Y = AB + A\bar{B}(\bar{A}+\bar{C}) = AB + A\bar{B}\bar{A} + A\bar{B}\bar{C}$

$A\bar{B}\bar{A} = \emptyset$

$Y = AB + A\bar{B}\bar{C} = A(B + \bar{B}\bar{C}) = A\cdot(B+\bar{B})\cdot(B+\bar{C})$

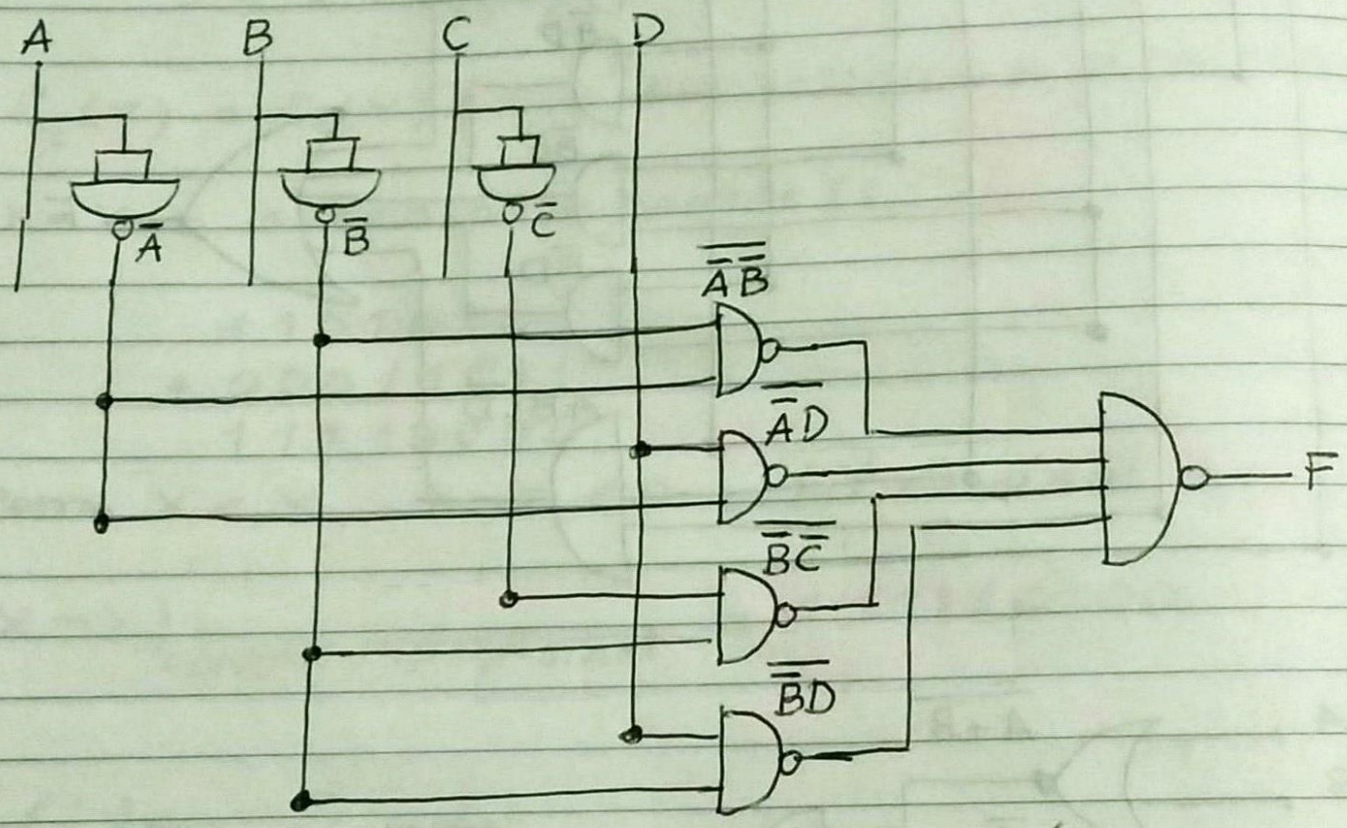
propriedade distrib. + vs ·

$Y = A(B+\bar{C})$

b) $F = \bar{A}\bar{B} + \bar{A}D + \bar{B}\bar{C} + \bar{B}D$ com operações NAND

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

operações NAND



c) $A\cdot\overline{B+C}$