

PROBLEMAS PARA RESOLVER EN CASA DE TEOREMAS DE BOOLE.

Aplicar los teoremas de D' Morgan a cada una de las siguientes expresiones

(a) $\overline{(A + B + C)D}$

R: $\overline{(A+B+C)+D} = \overline{A}*\overline{B}*\overline{C}+\overline{D}$

(b) $\overline{ABC + DEF}$

R: $\overline{ABC*DEF} = (\overline{A}+\overline{B}+\overline{C})*(\overline{D}+\overline{E}+\overline{F})$

(c) $\overline{A\overline{B} + C\overline{D} + EF}$

R: $\overline{(\overline{A}\overline{B})*(\overline{C}\overline{D})*(\overline{E}\overline{F})} = (\overline{A}+B)*(C+\overline{D})*(\overline{E}+F)$

(d) $\overline{(\overline{A + B}) + \overline{C}}$

R: $\overline{(\overline{A+B})*\overline{C}} = (A+B)*C$

(e) $\overline{(\overline{A + B}) + CD}$

R: $\overline{(\overline{A+B})*(\overline{CD})} = (A*\overline{B})*(\overline{C}+\overline{D})$

(f) $\overline{(A + B) \overline{CD} + E + \overline{F}}$

R: $\overline{((A+B)*\overline{CD})*\overline{E}*F} = ((\overline{A+B})+\overline{CD})*\overline{E}*F = (\overline{A}*\overline{B}+(C+D))*\overline{E}*F$