

Simplifique as seguintes funções:

$$F = \overline{\overline{C\overline{D}} + \overline{A\overline{B}C} + A(\overline{B + \overline{C}}) + \overline{B.(C + D)}}$$

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

$$F = \overline{\overline{(A \oplus C).(\overline{A \oplus B}).(\overline{A + B + A + D})}}$$

$$F = \overline{\overline{X\overline{Y} + X\overline{W}.Z + \overline{Y}Z + \overline{X}.ZW}}$$

$$z = \overline{\overline{AB\overline{C}D} + \overline{A\overline{B}C} + \overline{\overline{C}D} + AC.A}$$

$$F = A.B.\overline{C}.\overline{D} + B.\overline{A}(\overline{D} + \overline{C}) + B.C.(D \oplus C)$$

$$\overline{\overline{\overline{A + B + \overline{C}.D} + A \cdot \overline{B}.D + A \cdot D + \overline{A \oplus D} \cdot \overline{A + D}}}$$

$$F = \overline{\overline{DAD} \cdot (\overline{\overline{DA} + C(A + DC)}) \cdot \overline{D \oplus C} + C\overline{A}}$$

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