

CSIE 2344: Discussion (Unit 5)

1 Karnaugh Map I

Find the minimum sum-of-products for $F(A, B, C) = M_0 \cdot M_5$.

2 Karnaugh Map II

In Lecture 3, we have $F = A'B'C' + ABC' + A'BC + AB'C$. Can you further simplify it?

3 Karnaugh Map III

Plot $F(A, B, C, D) = A'B' + CD' + ABC + A'B'CD' + ABCD'$ on a Karnaugh map (do not expand to the minterm form before plotting). Find the minimum sum of products and the minimum product of sums.

4 Karnaugh Map IV

Find the minimum sum-of-products for $F(A, B, C) = \sum m(1, 2, 3) + \sum d(0, 5, 7)$.

5 Karnaugh Map V

Find all possible minimum sum-of-products for $F = WXY' + (W'Y' \equiv X) + (Y \oplus WZ)$.

