

Digital Logic Basics

Simplify the following Boolean function F , together with the dont-care conditions d , and then express the simplified function in sum-of-minterms form:

1. $F(x, y, z) = \sum(0, 1, 4, 5, 6)$

$$d(x, y, z) = \sum(2, 3, 7)$$

2. $F(A, B, C, D) = \sum(4, 12, 7, 2, 10)$

$$d(A, B, C, D) = \sum(0, 6, 8)$$