

Q5e

Use K-map

$$F(A, B, C, D) = \sum m(0, 1, 2, 3, 4, 7, 8, 9) + \sum d(10, 11, 12, 13, 14, 15)$$

		CD			
		C'D	CD	CD	C'D
		00	01	11	10
AB	00	1	1	1	1
AB	01	1	X	1	X
AB	11	X	X	X	X
AB	10	1	1	X	X

~~$$F = A + B + C + D$$~~

$$B' + C'D + CD$$

$$B' = (0, 1, 2, 3, 4, 10, 11)$$

$$C'D = (0, 4, 8, 12)$$

$$CD = (3, 7, 11, 15)$$

$$\text{Find expression} = B' + C'D + CD$$