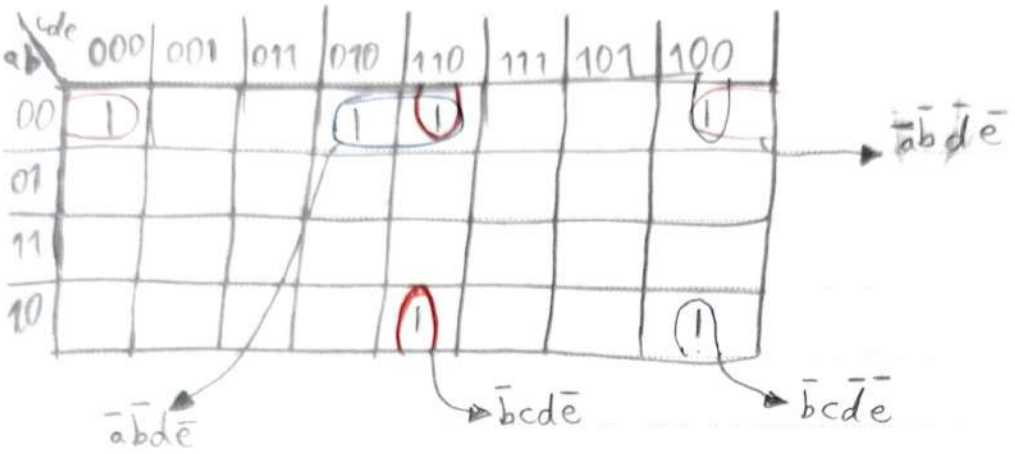
Subject: تکلیف چهارم
Date: ۸۱۱۹۰۱۰۳۸

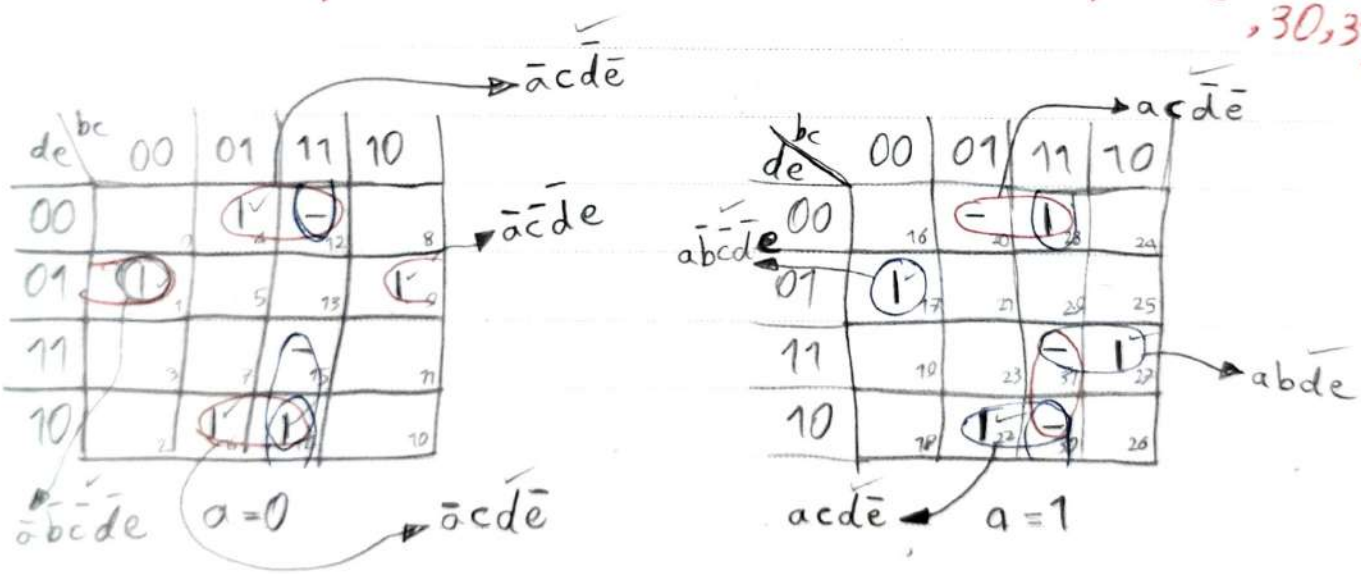
محمدرسول امانی

a. $f(a,b,c,d,e) = \sum_m (0,2,4,6,20,22)$ ①



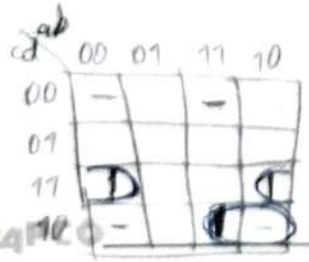
$w = \bar{a}\bar{b}\bar{e} + \bar{b}c\bar{e}$

b. $f(a,b,c,d,e) = \sum_m (1,4,6,9,14,17,22,27,28) + d(12,15,20,30,31)$



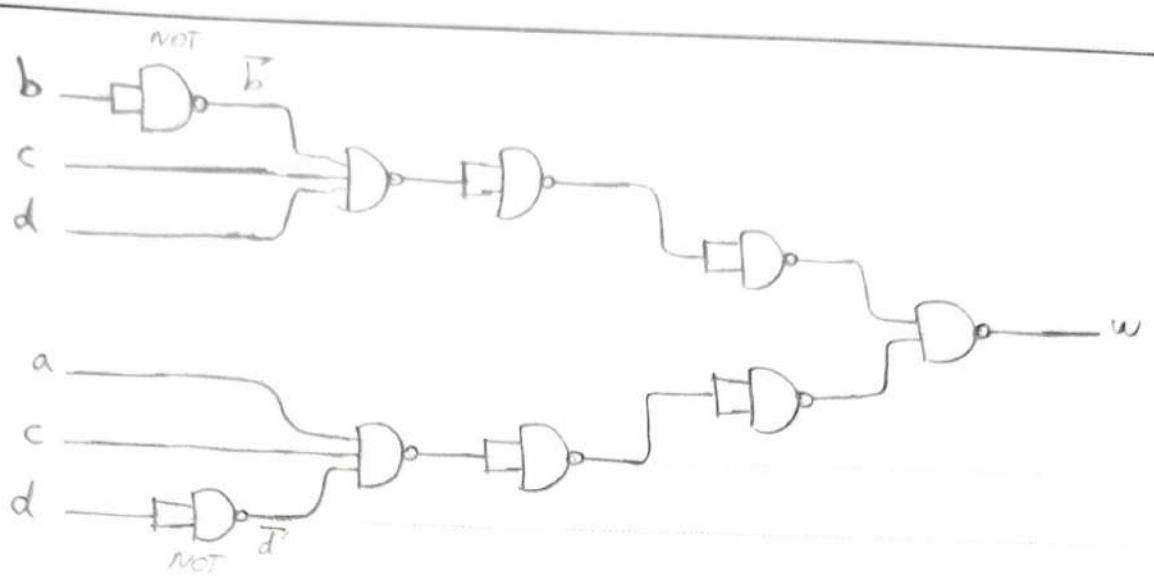
$w = cd\bar{e} + \bar{b}\bar{c}d\bar{e} + \bar{a}\bar{c}\bar{d}e + c\bar{d}\bar{e} + abde + \bar{a}\bar{c}d\bar{e}$

$f(a,b,c,d) = \sum_m (3,7,14) + d(0,2,10,12)$ ②



$w = \bar{b}cd + ac\bar{d}$

Subject:
Date



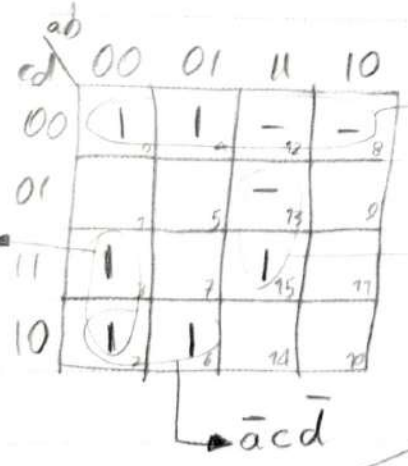
Verilog: Module func(input a, b, c, d, output w)

assign w = (((b==0 & c==1) & (d==1)) | ((a==1 & c==1) & (d==0)));

endmodule

(4)

$f(a,b,c,d) = \sum_m(0,2,3,4,6,15,25,28,29) + d(8,12,13,17)$



$w = \bar{c}\bar{d} + abd + \bar{a}c\bar{d} + \bar{a}bc$

module func1 (input a, b, c, d, output w)

assign w = ((c==0 & d==0) | (a==1 & b==1 & d==1) | (a==0 & c==1 & d==0) | (a==0 & b==0 & c==1));

endmodule