

Homework 5; 23.33/50.00 (46.66%)

November 2, 2019

Problem 1 (score: 3.33/10)¹

- (a) NOT ok (SOP is wrong, POS is correct)
- (b) NOT ok (what are essential minterms for $A'C$, $A'CD$ or $A'B'C$?)
- (c) OK

Problem 2 (score: 10/10)

OK

Problem 3 (score: 10/10)

OK, but why did you draw Carnaugh diagram two times?

Problem 4 (score: 0/10)²

- (a) NOT ok (ACD' is not prime as it is included in ad' ; note that don't-cares are treated as 1s, see p. 140);
- (b) NOT ok ($bc'd$ is prime, but not mentioned);

Problem 5 (score: 0/10)³

NOT ok (why $(a, b, c, d) = (0, 1, 0, 0)$ yields 0? doesn't it correspond to number 2, which is prime?)

¹similar problems: https://github.com/nailbiter/for/blob/master/formasha/logic_design/makeup_problems4.md#jCxLk21Mxfb4 and https://github.com/nailbiter/for/blob/master/formasha/logic_design/makeup_problems4.md#kvFjssettk0Z

²similar problems: https://github.com/nailbiter/for/blob/master/formasha/logic_design/makeup_problems4.md#vyw9bn7r1n63 and https://github.com/nailbiter/for/blob/master/formasha/logic_design/makeup_problems4.md#e7an6mkz7uwp

³similar problems: https://github.com/nailbiter/for/blob/master/formasha/logic_design/makeup_problems4.md#a1cvyl07mzea and https://github.com/nailbiter/for/blob/master/formasha/logic_design/makeup_problems4.md#ltmwc6eiyah2