

COE/EE 243
Homework Assignment #4
Due Wednesday February 26 by 5:00pm

Show your work on all of the problems below. If you want to see sample problems with solutions go to <http://www.ddpp.com/student/student.html> or the examples on the course web page.

1. Use the Quine-McCluskey procedure to find all of the prime implicants for
 $f(a, b, c) = \sum m(2, 4, 6, 7)$.
2. Using a prime implicant chart, find all minimum sum-of-products solutions for the function of problem 1.
3. Use the Quine-McCluskey procedure to find all of the prime implicants for
 $f(a, b, c, d) = \sum m(0, 1, 5, 6, 8, 9, 11, 13) + \sum d(7, 10, 12)$
4. Using a prime implicant chart, find all minimum sum-of-products solutions for the function of problem 5.
5. Problem 4.67 in your text.