Homework 2
May 14, 2012

- deMicheli94 5.10
- deMicheli94 5.15
- deMicheli94 6.1
- deMicheli94 6.4
- deMicheli94 6.6
- deMicheli94 6.7
- deMicheli94 6.8
- deMicheli94 2.4
- deMicheli94 2.5
- deMicheli94 7.4
- deMicheli94 7.5
- deMicheli94 7.6
- deMicheli94 9.1

- Apply the Quine-McCluskey algorithm to the following sum of minterms:
  \[ \sum (m_0, m_2, m_3, m_4, m_6, m_7, m_9, m_{11}, m_{13}, m_{15}) \]

- Apply the Quine-McCluskey algorithm together with branch-and-bound to the following sum of minterms: \[ \sum (m_2, m_6, m_7, m_8, m_9, m_{13}, m_{15}) \]

- Prove that \[ f = ab + cd + b'd' + a'c'd + a'bd' + ab'd' \] is a tautology by using the recursive Shannon expansion.

- Find the complement of \[ f = ab + bc + ad \], by using the recursive Shannon expansion.

- Decide whether \[ ac' \] is contained within the cover \[ F = ab + bc + b'c' \], by using the recursive Shannon expansion.