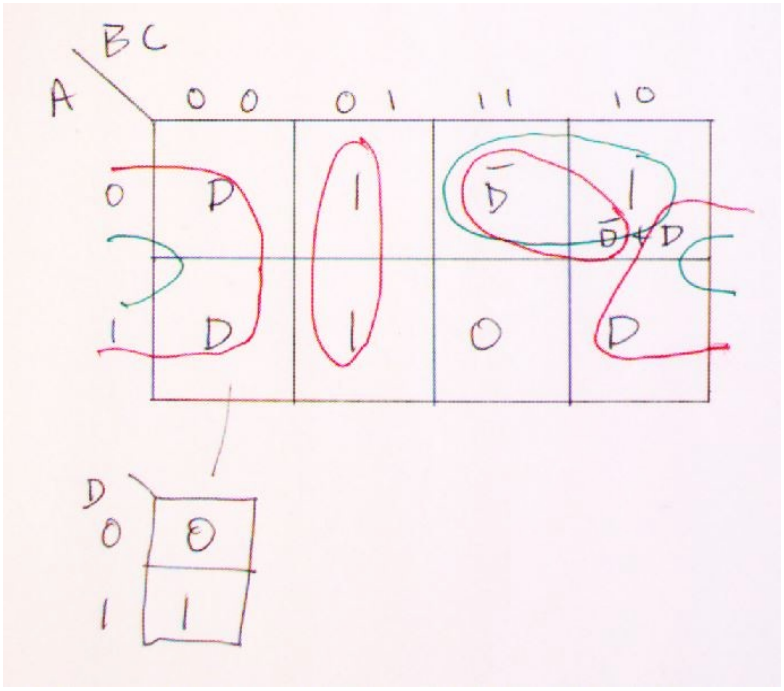
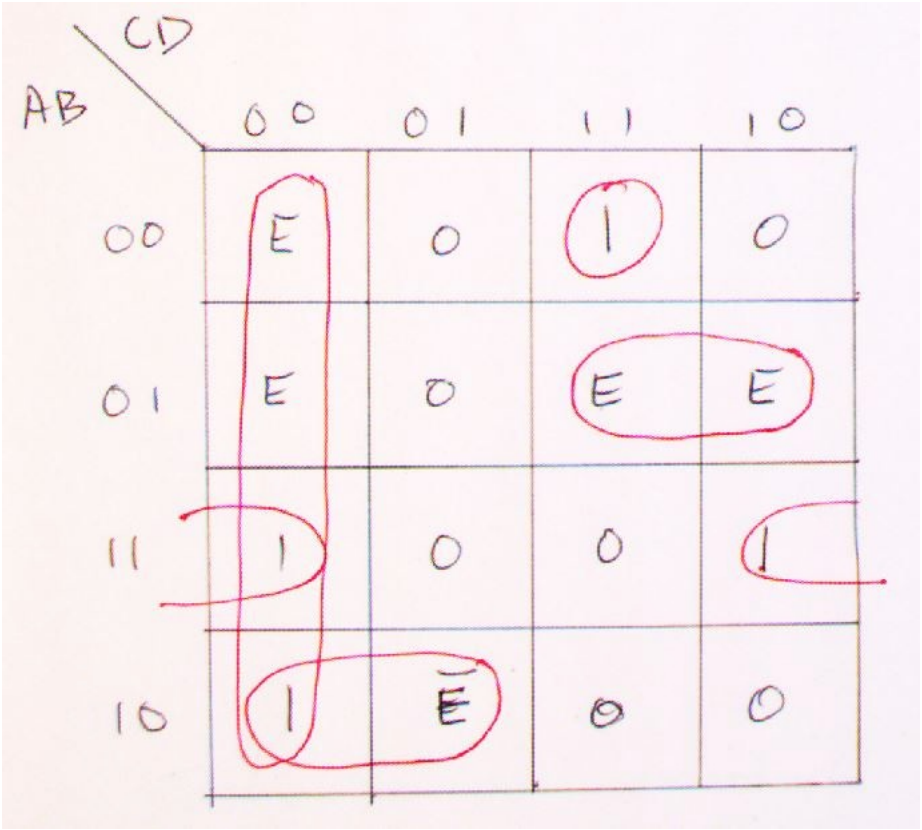
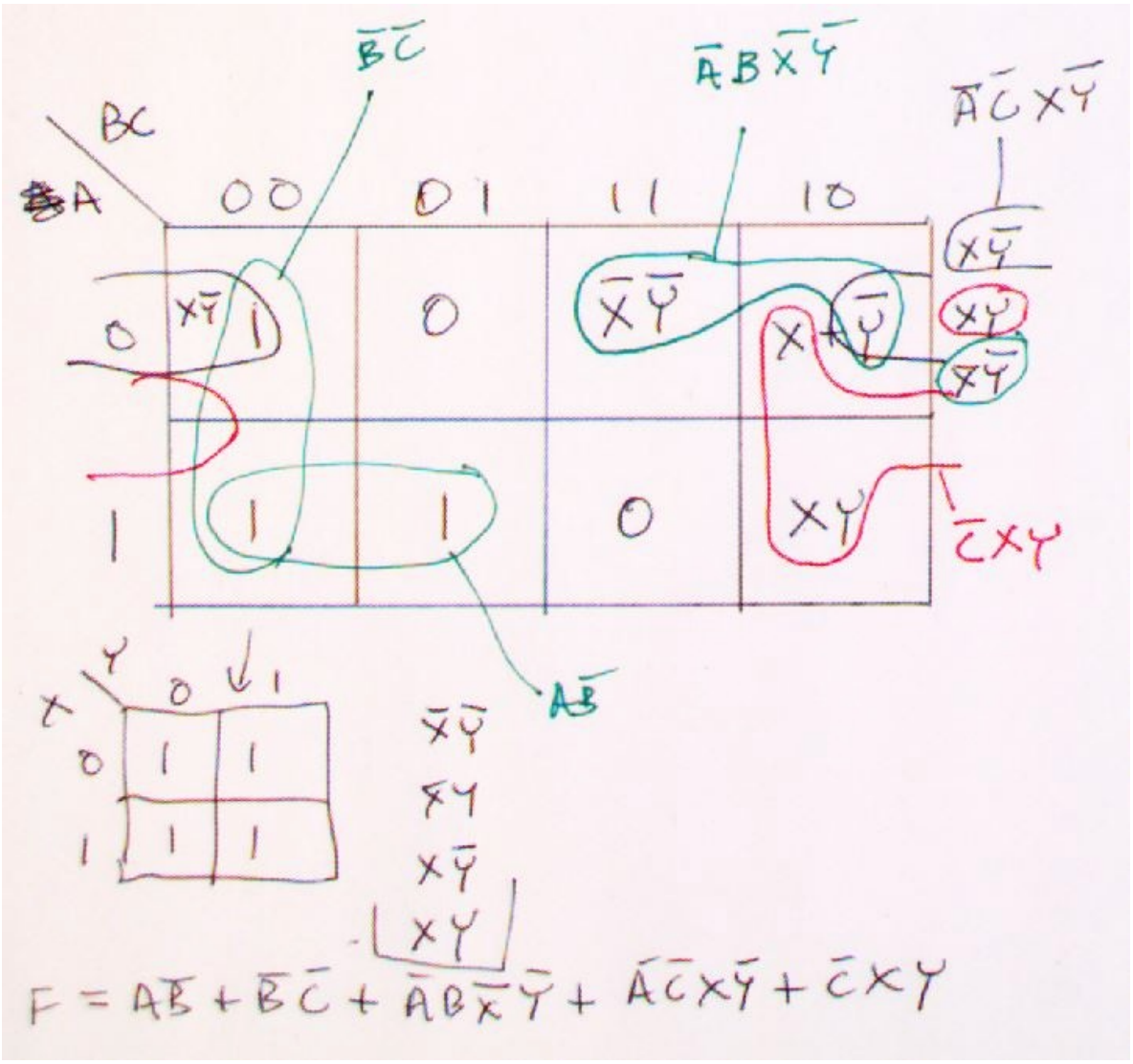
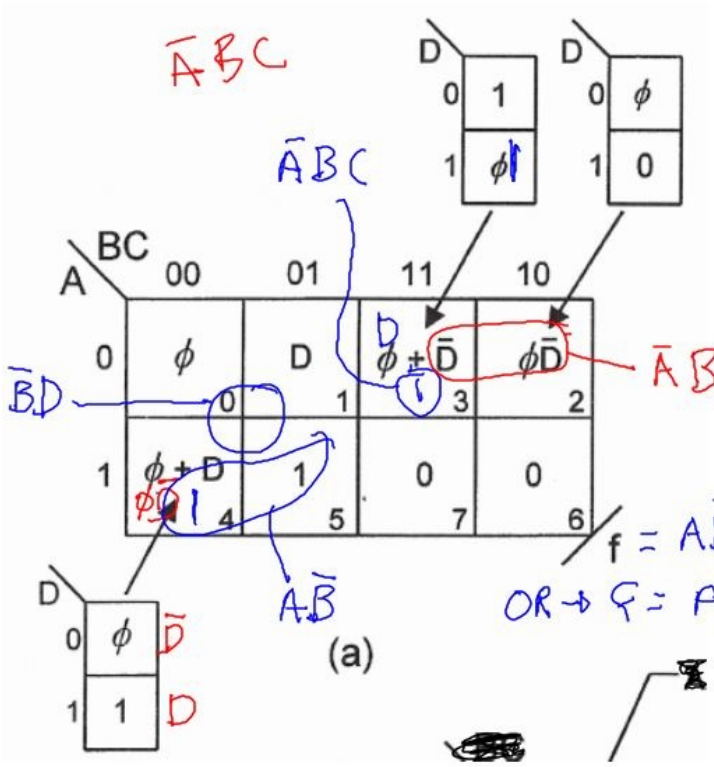
ENGR-354 Visuals from class on Wednesday 9/30/20 (plus a couple more)



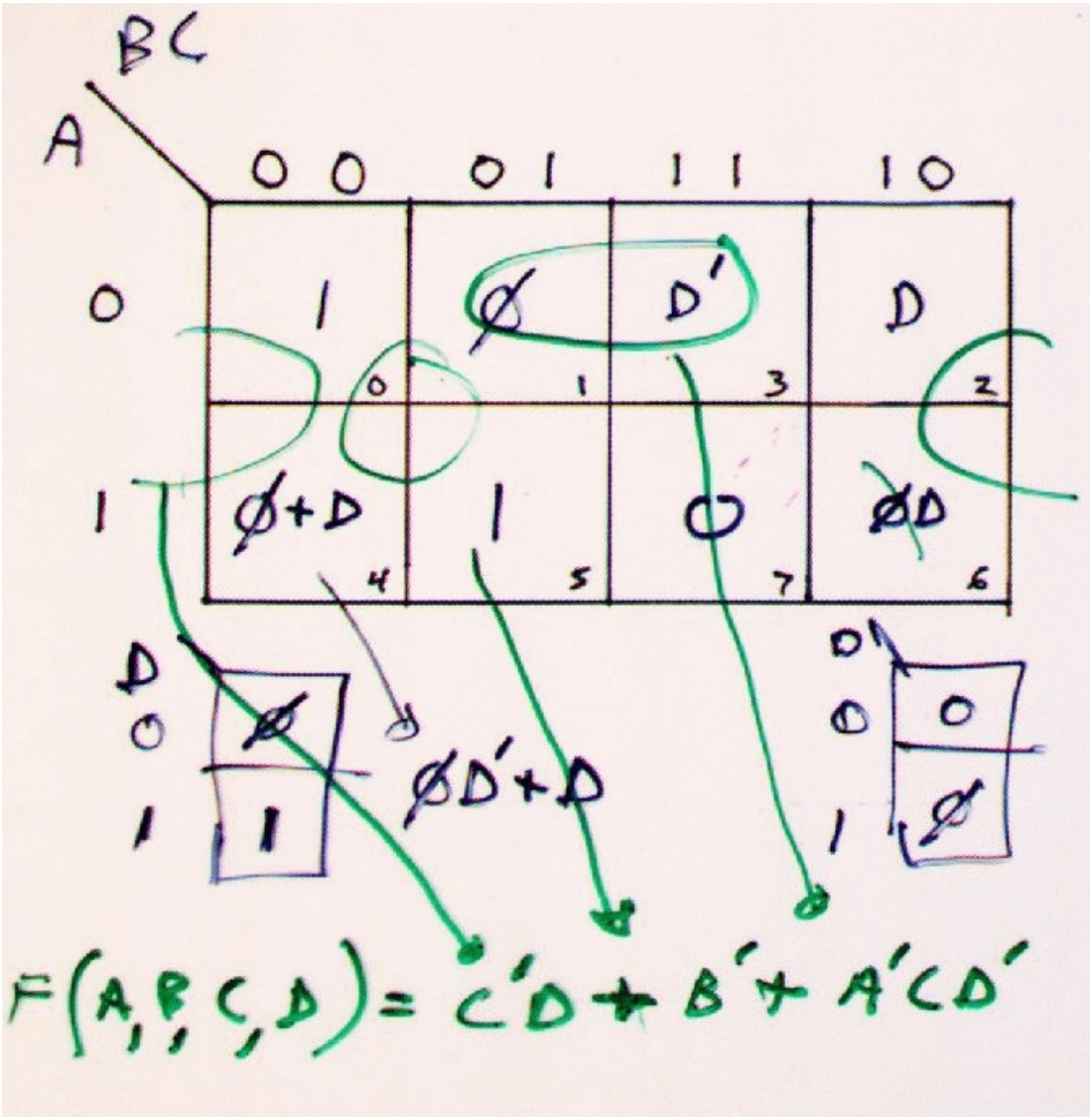



$\bar{B}\bar{C}$
$\bar{A}B\bar{X}\bar{Y}$
$\bar{A}\bar{C}X\bar{Y}$
BC
A
00
01
11
10
$X\bar{Y}$
$\bar{C}XY$
$\bar{A}\bar{B}$
X
Y
$\bar{X}\bar{Y}$
$\bar{X}Y$
$X\bar{Y}$
XY
$F = A\bar{B} + \bar{B}\bar{C} + \bar{A}B\bar{X}\bar{Y} + \bar{A}\bar{C}X\bar{Y} + \bar{C}XY$

$$f(A, B, C, D) = \sum m(3, 6, 9, 10, 11) + \phi(0, 1, 4, 7, 8)$$



Here is another example of a looped out entered variable map with don't cares



A standard k-map showing both SOP and POS loop-out and resulting “cost” to construct a logic circuit for each.

Blue loops are SOP and red loops are POS