(a)
$$F(W, X, Y, Z) = \sum (0, 1, 2, 4, 5, 6, 8, 10, 13, 15)$$

essential prime implicants $\Rightarrow Wy$

PI: xyz

or of 11

or of 11

PI: xyz

or of 11

F = W'y' + W'z' + X'z' + WXZX.