

(1) 試以基本的 AND, OR 與 Not 等邏輯閘執行下列各交換函數

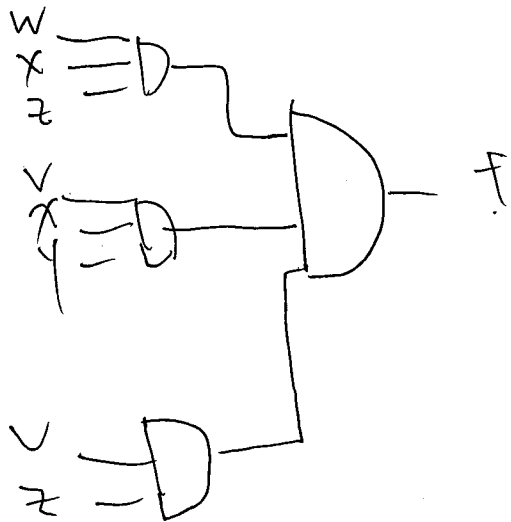
" $f(w, x, y, z) = (w+x+z)(v+x+y)(v+z)$

o $f(x, y, z) = xz + xy' + y'z$

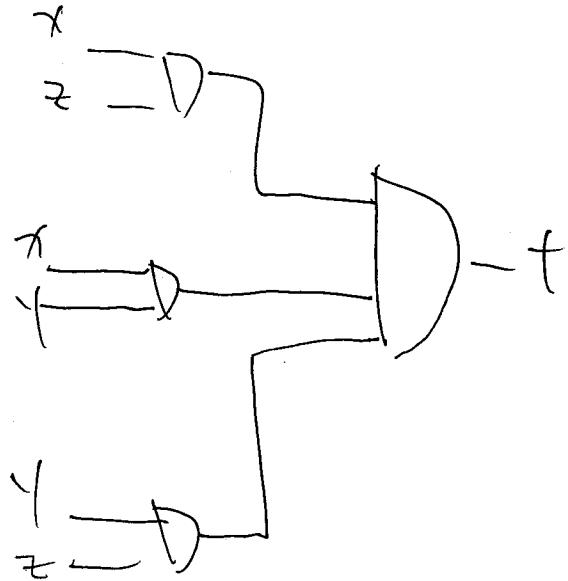
(3) $f(w, x, y, z) = xy + y(wz' + wz) \Rightarrow xy + y(w(z'+z))$

(4) $f(w, x, y, z) = xyz + (x+y)(x+y')$

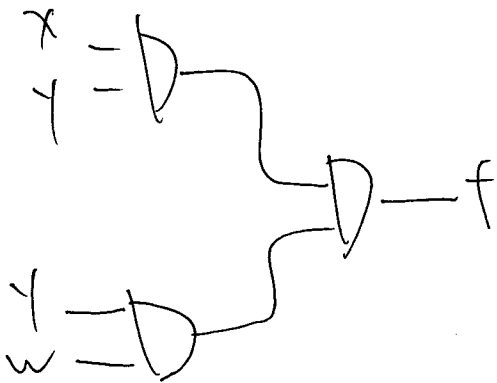
q1



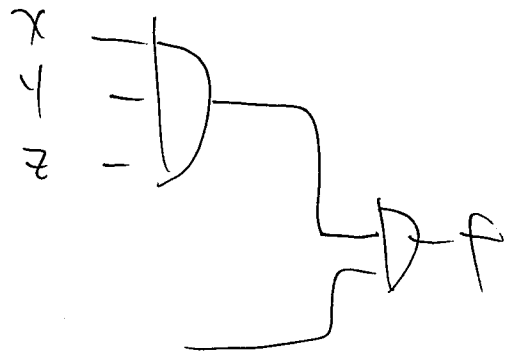
(2)



(3)



(4)



2.2 9. 以下列各指定的方式，執行下列函數

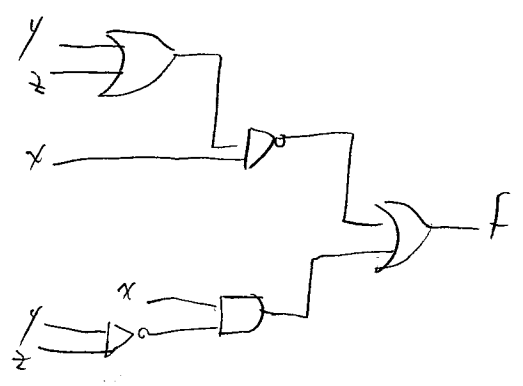
$$F(x, y, z) = x'y + x'z + xy'z' \quad x'(y+z) + xy' + z'$$

1) 使用 AND, OR, 每個 OR 門 (2ⁿ) 只有兩個輸入端

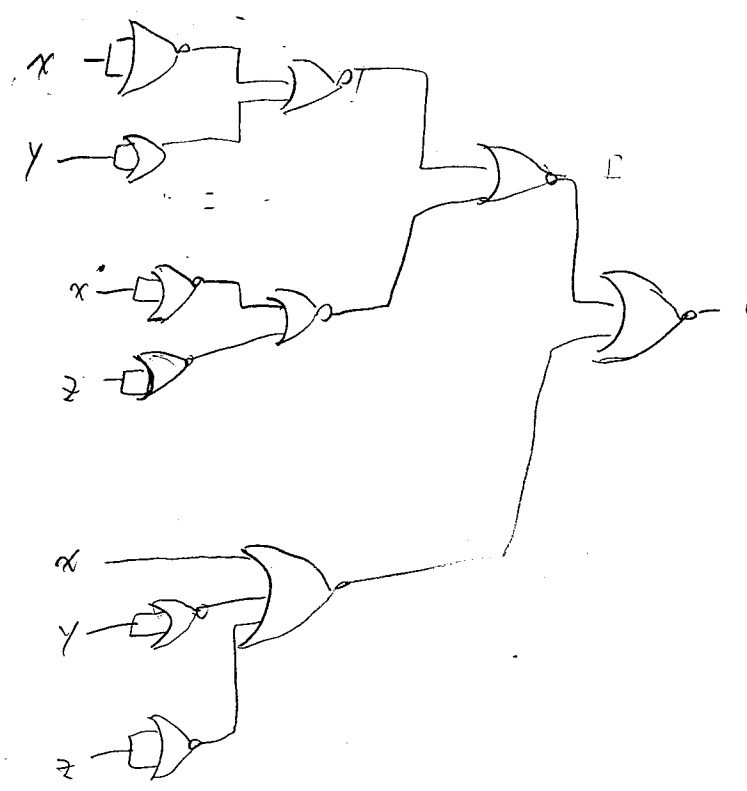
2) 兩個輸入 NOR

3) 兩個輸入 NAND

a)



b)



c)

