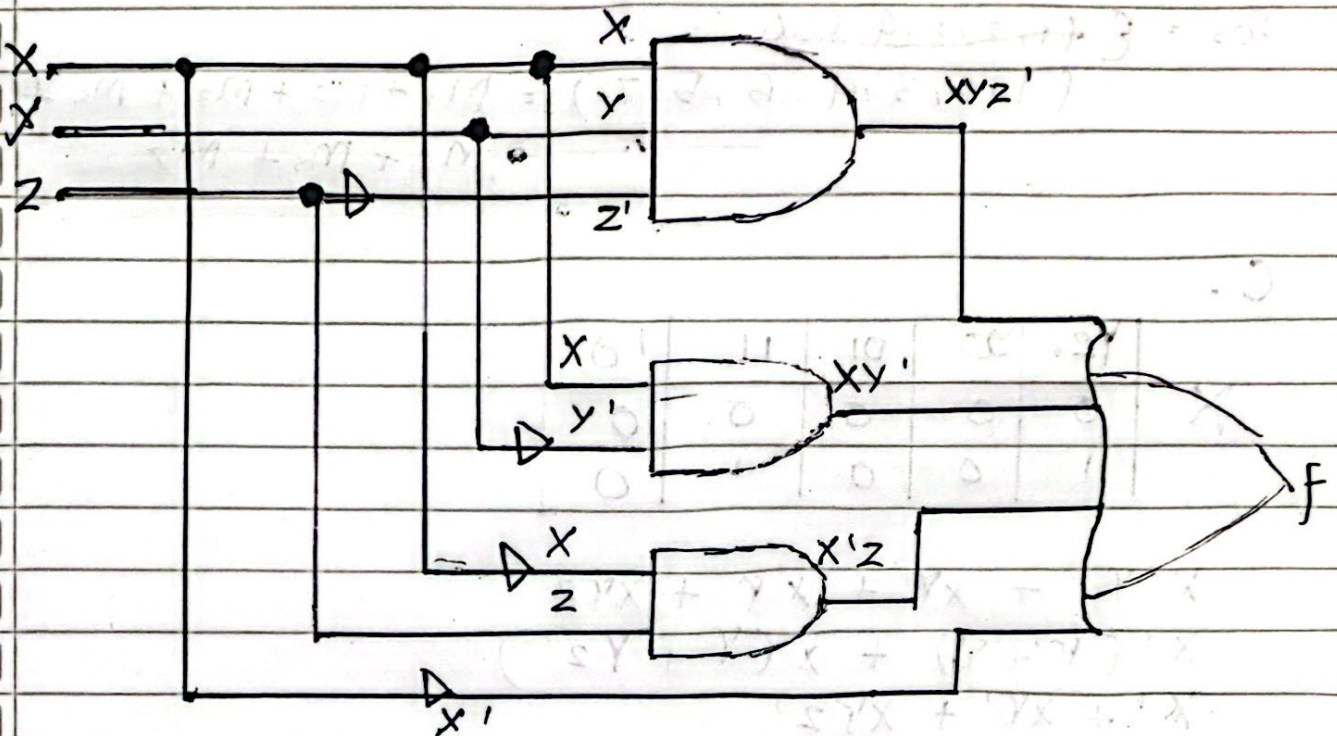Nomo : Rafi Ilkhwansyah
Nim : 413912401026
Kelas : TRPL 1A PAGI

a). Tuliskan Fungsi Boolean $F(w,x,z)$ yg mempresentasikan rangkaian diatas! Jawab : $F(x,y,z) = XYZ' + XY' + X'Z + X'$

b). Tuliskan fungsi $F(x,y,z)$ dlm bentuk kanokonik Pos!

X	Y	Z	F
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	1

$F(x,y,z) : XYZ' + XY' + X'Z + X'$

• $XY' \Rightarrow XY' + (ZZ')$
  $= (x+Y'+z)(x+Y'+z')$

• $X' = x (Y+Y')$
  $= (x'+Y)(x'+Y')$
  $= (x'+Y+z)(x+Y+z')(x+x'+z)$
  $(x'+z')$

• $X'Z = X'Z + (YY')$
  $= (x'+Y+z)(x'+Y'+z)$

Friend make the world beautiful.

Nim = 9392401026

$$F(X, Y, Z) = (X + Y' + Z)(X + Y + Z')(X' + Y + Z)$$
$$(X' + Y' + Z)(X' + Y + Z')(X' + Y' + Z')$$
$$(X + Y + Z')$$

Pos = { ~~1, 2, 3, 4, 5, 6~~

$$(1, 2, 3, 4, 6, 5, 7) = M_1 + M_2 + M_3 + M_4 +$$
$$= M_6 + M_5 + M_7$$

C.

YZ \ X	00	01	11	10
0	0	0	0	0
1	0	0	1	0

$$X'Y' + XY' + X'Y + XYZ'$$
$$X'(Y' + Y) + X(Y' + YZ')$$
$$X' + XY' + XYZ'$$
$$X' + X(Y' + YZ')$$