$$128 \quad 64 \quad 32 \quad 16 \quad 8 \quad 4 \quad 2 \quad 1$$
$$2^7 \quad 2^6 \quad 2^5 \quad 2^4 \quad 2^3 \quad 2^2 \quad 2^1 \quad 2^0$$

a) 172.30.200.0/20

i. LAN Guillermo – 2000 Host $\Rightarrow 2^{11} - 2 = 2046$

ii. LAN Missael – 700 Host $\Rightarrow 2^{10} - 2 = 1022$

iii. LAN Cynthia – 120 Host $\Rightarrow 2^7 - 2 = 126$

iv. CAN Paolina – 50 Host $\Rightarrow 2^6 - 2 = 62$

v. WAN Hector – 2 Host $\Rightarrow 2^2 - 2 = 2$

vi. WAN Sergio – 2 Host $\Rightarrow 2^2 - 2 = 2$

i. Mascara $\Rightarrow$ 11111111.11111111.11110000.00000000 /21

ii. Mascara $\Rightarrow$ 11111111.11111111.00000000.00000000 /22

iii. Mascara $\Rightarrow$ 11111111.11111111.00000000.00000000 /25

iv. Mascar $\Rightarrow$ 11111111.11111111.00000000.00000000 /26

v. Mascar $\Rightarrow$ 11111111.11111111.00000000.00000000

	SobRed		
/21	172.30.0.0	172.30.0.1 – 172.30.7.254	172.30.7.255 /21
/22	172.30.8.0	172.30.8.1 – 172.30.11.254	172.30.11.255 /22
/25	172.30.12.0	172.30.12.1 – 172.30.12.126	172.30.12.177 /25
/26	172.30.12.128	172.30.12.129 – 172.30.12.190	172.30.12.191 /26
/30	172.30.12.192	172.30.12.193 – 172.30.12.194	172.30.12.195 /30
/30	172.30.12.196	172.30.12.197 – 172.30.12.198	172.30.12.199 /30
	172.30.12.200		