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Matkul : Praktikum Jarkom

1. 192.168.2.0/24 → Subnet mask kelas C

$$\underbrace{\underbrace{11111111}_{255}\ \underbrace{11111111}_{255}\ \underbrace{11111111}_{255}}_{24}\ \underbrace{00000000}_{0}\ \xleftarrow{32\,bit}$$
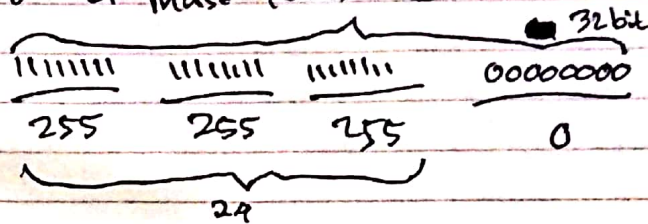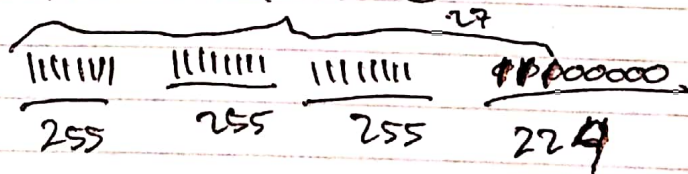
- Jumlah subnet = $2^0 = 2^0 = 1$ Subnet
- Jumlah host = $2^4 - 2 = 2^8 - 2 = 256 - 2 = 254$
- block subnet = $256 - 0 = 256$

- tabel subnet :

network	192.168.2.0	192.168.2.256
IP awal	192.168.2.1	
IP akhir	192.168.2.254	
broadcast	192.168.2.255	

2. 10.3.51.0/27 → Subnet mask kelas C

$$\underbrace{11111111}_{255}\ \underbrace{11111111}_{255}\ \underbrace{11111111}_{255}\ \overset{27}{\underbrace{11100000}_{224}}$$
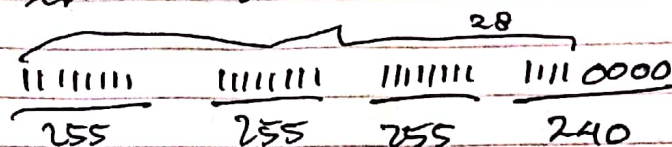
- Jumlah subnet = $2^0 = 2^3 = 8$ subnet
- Jumlah host = $2^4 - 2 = 2^5 - 2 = 32 - 2 = 30$ host
- block subnet = $256 - 224 = 32$

a) Tabel subnet

network	10.3.51.0	10.3.51.32	....	10.3.51.192
IP awal	10.3.51.1	10.3.51.33	.....	10.3.51.193
IP akhir	10.3.51.30	10.3.51.62	....	10.3.51.222
broadcast	10.3.51.31	10.3.51.63	....	10.3.51.223

3.) 10.10.10.0 / 28 ⟹ subnet mask kelas C

$$\underbrace{\underbrace{11111111}_{255} \quad \underbrace{11111111}_{255} \quad \underbrace{11111111}_{255} \quad \underbrace{1111\,0000}_{240}}_{28}$$
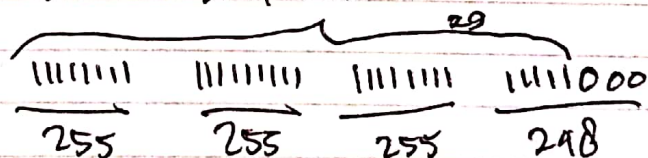
a) Jumlah subnet $= 2^u = 2^4 = 16$ subnet
b) Jumlah host $= 2^y - 2 = 2^4 - 2 = 16 - 2 = 14$ host
c) block subnet $= 256 - 240 = 16$

network	10.10.10.0	10.10.10.16	....	10.10.10.224
IP awal	10.10.10.1	10.10.10.17	....	10.10.10.225
IP akhir	10.10.10.14	10.10.10.30	....	10.10.10.238
broadcast	10.10.10.15	10.10.10.31	....	10.10.10.239

4.) 192.168.10.0 /29 . subnet mask kelas C

$$\underbrace{\underbrace{11111111}_{255} \quad \underbrace{11111111}_{255} \quad \underbrace{11111111}_{255} \quad \underbrace{11111\,000}_{248}}_{29}$$

a) Jumlah subnet $= 2^u = 2^5 = 32$ subnet
b) Jumlah host $= 2^y - 2 = 2^3 - 2 = 8 - 2 = 6$ host
c) block subnet $= 256 - 248 = 8.$

network	192.168.10.0	192.168.10.8	....	192.168.10.240
IP awal	192.168.10.1	192.168.10.9	....	192.168.10.241
IP akhir	192.168.10.6	192.168.10.14	....	192.168.10.246
broadcast	192.168.10.7	192.168.10.15	....	192.168.10.247