Ipv4
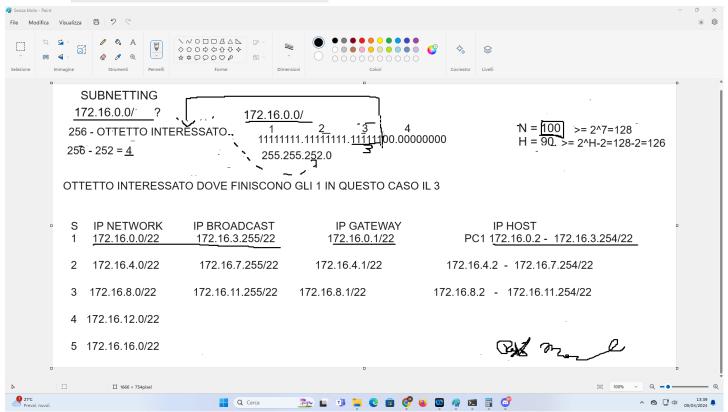
Classe A 0-127   10.10.10.10

Classe B 128 - 191   172.168.3.4

Classe C 192 - 223   192.168.1.206

Classe D 224 - 239   225.67.8.9

Classe E 240 - 255   255.255.255.255

SUBNETTING

172.16.0.0/   ?

256 - OTTETTO INTERESSATO..

256 - 252 = 4

172.16.0.0/

1   2   3   4
11111111.11111111.111111 00.00000000

255.255.252.0

$N = \boxed{100}$ $\geq 2^7 = 128$
$H = 90 \geq 2^H - 2 = 128 - 2 = 126$

OTTETTO INTERESSATO DOVE FINISCONO GLI 1 IN QUESTO CASO IL 3

S	IP NETWORK	IP BROADCAST	IP GATEWAY	IP HOST
1	172.16.0.0/22	172.16.3.255/22	172.16.0.1/22	PC1 172.16.0.2 - 172.16.3.254/22
2	172.16.4.0/22	172.16.7.255/22	172.16.4.1/22	172.16.4.2 - 172.16.7.254/22
3	172.16.8.0/22	172.16.11.255/22	172.16.8.1/22	172.16.8.2 - 172.16.11.254/22
4	172.16.12.0/22			
5	172.16.16.0/22			

Scrivere per i seguenti IP: IP Network, IP Gateway 'convenzionale', IP Broadcast, quali e quanti ottetti per gli host, quanti e quali per la network.

● 1.1.1.1/8
● 128.1.6.5/12
● 200.1.2.3/24
● 192.192.1.1/22
● 126.5.4.3/9
● 200.1.9.8/24
● 172.16.0.4/16

1.1.1.1 / 8
Classe A -   (8)

Subnet = 255.0.0.0
Broadcast =1.255.255.255
IP Network =1.0.0.0
IP Gateway =1.0.0.1
IP Host =1.0.0.2/8 a 1.255.255.254/8
8 Network e 24 Host

128.1.6.5/ 12   (1+2+4+8=15)
Classe B   (8+4) = (11111111.11110000.00000000.00000000)
                                  256.240.0.0
Subnet = 255.240.0.0
Broadcast = 128.15.255.255
Ip Network = 128.0.0.0/12
IP gateway = 128.0.0.1/12
IP Host = 128.0.0.2/12 A 128.15.255.254/12
12 Network + 20 Host

200.1.2.3/24

Classe C   (8+8+8) = (11111111.11111111.11111111.00000000)
Subnet = 255.255.255.0
Broadcast = 200.1.2.255
IP Network = 200.1.2.0/24
IP Gateway = 200.1.2.1/24
IP Host = 200.1.2.1/24 A 200.255.254
24 Network+8 Host

192.192.1.1/22
Classe C   (8+8+6) = (11111111.1111111.11111100.00000000)

Subnet = 255.255.252.0
Broadcast = 192.192.1.255/22
IP Network = 192.192.3.255
IP Gateway = 192.192.0.1

IP Host = 192.192.0.2 A 192.192.3.254

22 Network + 10 host

126.5.4.3/9

Classe A   (8+1) = (nnnnnnnn.nhhhhhhh.hhhhhhhh.hhhhhhhh)

Subnet =126.128.0.0
Broadcast =126.128.255.255
IP Network =126.128.0.0
IP Gateway =126.128.0.1
IP Host =126.128.0.2

9 Network + 23 host

172.16.0.4/16

Classe B   (8+8) (nnnnnnnn.nnnnnnnn.hhhhhhhh.hhhhhhhh)

Subnet =255.255.0.0
Broadcast = 172.16.255.255
IP Network =172.16.0.0
IP Gateway =172.16.0.1
IP Host =172.16.02 A 172.16.254