

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 CIDR 8 Classe A

Binario 00000001.00000001.00000001.00000001

Netmask 11111111.00000000.00000000.00000000

Cioè 255.0.0.0

IP Broadcast 00000001.11111111.11111111.11111111

Cioè 1.255.255.255

IP Network 00000001.00000000.00000000.00000000

Cioè 1.0.0.0

IP Gateway 00000001.00000000.00000000.00000001

Cioè 1.0.0.1

Host possibili $(256 * 2^{16}) - 2 = 16.777.214$

● 128.1.6.5/**12** CIDR **12** Classe B

Binario **10000000.00000001.00001010.00000101**

Netmask **11111111.11110000.00000000.00000000**

Cioè 255.240.0.0

IP Broadcast **10000000.00001111.11111111.11111111**

Cioè 128.15.255.255

IP Network **10000000.00000000.00000000.00000000**

Cioè 128.0.0.0

IP Gateway **10000000.00000000.00000000.00000001**

Cioè 128.0.0.1

Host possibili $(256 * 2^{12}) - 2 = 1.048.574$

● 200.1.2.3/**24** CIDR **24** Classe C

Binario **11001000.00000001.00000010.00000011**

Netmask **11111111.11111111.11111111.00000000**

Cioè 255.255.255.0

IP Broadcast **11001000.00000001.00000010.11111111**

Cioè 200.1.2.255

IP Network **11001000.00000001.00000010.00000000**

Cioè 200.1.2.0

IP Gateway **11001000.00000001.00000010.00000001**

Cioè 200.1.2.1

Host possibili $(256 * 2) - 2 = 254$

● 192.192.1.1/22 CIDR 22 Classe C

Binario 11000000.11000000.00000001.00000001

Netmask 11111111.11111111.11111100.00000000

Cioè 255.255.252.0

IP Broadcast 11000000.11000000.00000011.11111111

Cioè 192.192.3.225

IP Network 11000000.11000000.00000000.00000000

Cioè 192.192.0.0

IP Gateway 11000000.11000000.00000000.00000001

Cioè 192.192.0.1

Host possibili $(256 * 2^2) - 2 = 1022$

● 126.5.4.3/9 CIDR 9 Classe A

Binario 01111110.00000101.00000100.00000011

Netmask 11111111.10000000.00000000.00000000

Cioè 255.128.0.0

IP Broadcast 01111110.01111111.11111111.11111111

Cioè 126.127.255.255

IP Network 01111110.00000000.00000000.00000000

Cioè 126.0.0.0

IP Gateway 01111110.00000000.00000000.00000001

Cioè 126.0.0.1

Host possibili $(256 * 2^{15}) - 2 = 8.388.606$

● 200.1.9.8/24 CIDR 24 Classe C

Binario 11001000.00000001.00001001.00001000

Netmask 11111111.11111111.11111111.00000000

Cioè 255.255.255.0

IP Broadcast 11001000.00000001.00001001.11111111

Cioè 200.1.9.255

IP Network 11001000.00000001.00001001.00000000

Cioè 200.1.9.0

IP Gateway 11001000.00000001.00001001.00000001

Cioè 200.1.9.1

Host possibili $(256) - 2 = 254$

● 172.16.0.4/16 CIDR 16 Classe B

Binario 10101100.00010000.00000000.00000100

Netmask 11111111.11111111.00000000.00000000

Cioè 255.255.0.0

IP Broadcast 10101100.00010000.11111111.11111111

Cioè 172.16.255.255

IP Network 10101100.00010000.00000000.00000000

Cioè 172.16.0.0

IP Gateway 10101100.00010000.00000000.00000001

Cioè 172.16.0.1

Host possibili $(256 * 2^8) - 2 = 65.534$