

① 1.1.1.1/8 Subnet Mask: 255.255.255.255 class:

IP: 00000001.00000001.00000001.00000001 AND

Subnet: 11111111.11111111.11111111.11111111

Network 00000001.00000001.00000001.00000001

Network
(decimal)
1.1.1.1

② 128.1.6.5/12 SM: 255.255.255 class:

IP: 10000000.00000001.0000110.0000101 AND

Subnet: 1111111.1111111.1111111.1111111

Network: 10000000 00000001 0000110 0000101

① 1.1.1.1/8

SM: 255.0.0.0

class A

CDR=8

IP: 00000001.00000001.00000001.00000001 AND

SM: 111111.00000000.00000000.00000000

0000001.0000000.0000000.0000000 NETWORK 1.0.0.0/8

IP: 00000001.00000001.00000001.00000001 OR

SM_{MIN}: 00000000.1111111.1111111.1111111

0000001.1111111.1111111.1111111 BROADCAST 1.255.255.255

② 128.1.6.5/12

SM: 255.240.0.0

class B

CDR=12

IP: 10000000.00000001.00000110.00000101 AND

SM: 11111111.11110000.00000000.00000000

10000000.00000000.00000000.00000000 Network 128.0.0.0

class B

IP: 10000000.00000001.00000110.00000101 OR

SM_{MIN}: 00000000.00001111.11111111.11111111

10000000.00001111.11111111.11111111 BROADCAST 128.15.255.255

③ 200.1.2.3/24

SM: 255.255.255.0

CLDR = 24
class C

IP: 11001000.00000001.00000010.00000001 AND

SM: 11111111.11111111.11111111.00000000

11001000.00000001.00000010.00000000 NETWORK 200.1.2.0

IP: 11001000.00000001.00000010.00000001 OR

SM_{MIN}: 00000000.00000000.00000000.11111111

11001000.00000001.00000010.111111 Broadcast 200.1.2.255

④ 192.192.1.1/22

SM: 255.255.252.0

class C

CLDR = 22

IP: 11000000.11000000.00000001.00000001 AND

SM: 11111111.11111111.11111100.00000000

11000000.11000000.00000000.00000000 NETWORK 192.192.0.0

IP: 11000000.11000000.00000001.00000001 OR

SM_{MIN}: 00000000.00000000.00000011.11111111

11000000.11000000.00000011.11111111 Broadcast 192.192.3.255

⑤ 126.5.4.3 /9

SM: 255.128.0.0

CDR=9

class A

IP: 01111110.00000101.00000100.00000011 AND

SM: 11111111.10000000.00000000.00000000

01111110.00000000.00000000.00000000 Network 126.0.0.0

IP: 01111110.00000101.00000100.00000011 OR

SM: 00000000.01111111.11111111.11111111

01111110.00000000.11111111.11111111 Broadcast 126.127.255.255

⑥ 200.1.9.8/24

SM: 255.255.255.0

CDR=24

class C

IP: 111001000.00000001.00001001.00001000 AND

SM: 11111111.11111111.11111111.00000000

111001000.00000001.00001001.00000000 Network 200.1.9.0

IP: 111001000.00000001.00001001.00001000 OR

SM: 00000000.00000000.00000000.11111111

111001000.00000001.00001001.11111111 Broadcast 200.1.9.255

⑦ 172.16.0.4/16

SM: 255.255.0.0

class: B

CIDR=16

IP: 10101000.00010000.00000000.00000100 AND

SM: 111111.11111.00000000.00000000

10101100.00010000.00000000.00000000 NETWORK

172.16.0.0

IP: 10101000.00010000.00000000.00000100 OR

SM_{inv}: 00000000.00000000.111111.111111

10101100.00010000.111111.111111 BROADCAST 172.16.255.255