1. 10.18.139.50/22

IP address:

10.18.139.50 => 00001010.00010010.100010 11.00110010

Subnetting:

255.255.252.0 = 11111111.11111111.111111 00.00000000

Number of bits taken for subnetting : 14

Number of Subnets possible: 2^14 = 16384

Number of host bits remaining : 10

Number of hosts possible in each subnet: 2^10 - 2 = 1022

First Host Address: 10.18.136.1

Last Host Address: 10.18.139.254

Network Address of this IP Address: 10.18.136.0

Previous Subnet to the current subnet: 10.18.132.0

Next Subnet to the Current Subnet: 10.18.140.0

Broadcast Address: 10.18.139.255

Previous IP Address: 10.18.139.49

Next IP Address: 10.18.139.51

2. 10.16.124.3/26

IP address:

10.16.124.3 => 00001010.00010000.01111100.00 000011

Subnetting:

255.255.255.192 = 11111111.11111111.11111111.11 000000

Number of bits taken for subnetting : 18

Number of Subnets possible: 2^18 = 262144

Number of host bits remaining : 6

Number of hosts possible in each subnet: 2^6 - 2 = 62

First Host Address: 10.16.124.1

Last Host Address: 10.16.124.62

Network Address of this IP Address: 10.16.124.0

Previous Subnet to the current subnet: 10.16.123.192

Next Subnet to the Current Subnet: 10.16.124.64

Broadcast Address: 10.16.124.63

Previous IP Address: 10.16.124.2

Next IP Address: 10.16.124.4

3. 172.16.0.50/22

IP address:

172.16.0.50 => 10101100.00010000.000000 00.00110010

Subnetting:

255.255.252.0 = 11111111.11111111.111111 00.00000000

Number of bits taken for subnetting : 6

Number of Subnets possible: 2^6 = 64

Number of host bits remaining : 10

Number of hosts possible in each subnet: 2^10 - 2 = 1022

First Host Address: 172.16.0.1

Last Host Address: 172.16.3.254

Network Address of this IP Address: 172.16.0.0

Previous Subnet to the current subnet: 172.15.252.0

Next Subnet to the Current Subnet: 172.16.4.0

Broadcast Address: 172.16.3.255

Previous IP Address: 172.16.0.49

Next IP Address: 172.16.0.51

4. 172.19.139.96/22

IP address:

172.19.139.96 => 10101100.00010011.100010 11.01100000

Subnetting:

255.255.252.0 = 11111111.11111111.111111 00.00000000

Number of bits taken for subnetting : 6

Number of Subnets possible: 2^6 = 64

Number of host bits remaining : 10

Number of hosts possible in each subnet: 2^10 - 2 = 1022

First Host Address: 172.19.136.1

Last Host Address: 172.19.139.254

Network Address of this IP Address: 172.19.132.0

Previous Subnet to the current subnet: 172.19.132.0

Next Subnet to the Current Subnet: 172.19.140.0

Broadcast Address: 172.19.139.255

Previous IP Address: 172.19.139.95

Next IP Address: 172.19.139.97

5. 192.168.9.29/26

IP address:

192.168.9.29 => 11000000.10101000.00001001.00 011101

Subnetting:

255.255.255.192 = 11111111.11111111.11111111.11 000000

Number of bits taken for subnetting : 2

Number of Subnets possible: 2^2 = 4

Number of host bits remaining : 6

Number of hosts possible in each subnet: 2^6 - 2 = 62

First Host Address: 192.168.9.1

Last Host Address: 192.168.9.62

Network Address of this IP Address: 192.168.9.0

Previous Subnet to the current subnet: 192.168.8.192

Next Subnet to the Current Subnet: 192.168.9.64

Broadcast Address: 192.168.9.63

Previous IP Address: 192.168.9.28

Next IP Address: 192.168.9.30

6. 192.168.9.29/28

IP address:

192.168.9.29 => 11000000.10101000.00001001.00 011101

Subnetting:

255.255.255.240 = 11111111.11111111.11111111.1111 0000

Number of bits taken for subnetting : 4

Number of Subnets possible: 2^4 = 16

Number of host bits remaining : 4

Number of hosts possible in each subnet: 2^4 - 2 = 14

First Host Address: 192.168.9.17

Last Host Address: 192.168.9.30

Network Address of this IP Address: 192.168.9.16

Previous Subnet to the current subnet: 192.168.9.0

Next Subnet to the Current Subnet: 192.168.9.32

Broadcast Address: 192.168.9.31

Previous IP Address: 192.168.9.28

Next IP Address: 192.168.9.30