**IP Address: 192.168.10.0/25**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 192 | . | 168 | . | 10 | . | 0 |
| 11000000 | . | 10101000 | . | 00001010 | . | 10000000 |

Class of IP Address: **C**

No. of Subnet: 2n = 21 = 2

No. of Host bit: 232-25 = 7

Subnet Size: 2h = 27 = 128

No. of Total Valid Host Per Subnet: 2h -2 = 126

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Network Address** | **First Valid IP** | **Last Valid IP** | **Broadcast Address** | **Subnet Mask** |
| 192.168.10.0 | 192.168.10.1 | 192.168.10.126 | 192.168.10.127 | 255.255.255.128 |
| 192.168.10.128 | 192.168.10.129 | 192.168.10.254 | 192.168.10.255 | 255.255.255.128 |

**IP Address: 192.168.40.0/29**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 192 | . | 168 | . | 40 | . | 0 |
| 11000000 | . | 10101000 | . | 00101000 | . | 11111000 |

Class of IP Address: **C**

No. of Subnet: 2n = 25 = 32

No. of Host bit: 232-29 = 3

Subnet Size: 2h = 23 = 8

No. of Total Valid Host Per Subnet: 2h -2 = 23 -2 = 6

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Network Address** | **First Valid IP** | **Last Valid IP** | **Broadcast Address** | **Subnet Mask** |
| 192.168.40.0 | 192.168.40.1 | 192.168.40.6 | 192.168.40.7 | 255.255.255.248 |
| 192.168.40.8 | 192.168.40.9 | 192.168.40.14 | 192.168.40.15 |
| 192.168.40.16 | 192.168.40.17 | 192.168.40.22 | 192.168.40.23 |
| 192.168.40.24 | 192.168.40.25 | 192.168.40.30 | 192.168.40.31 |
| 192.168.40.32 | 192.168.40.33 | 192.168.40.38 | 192.168.40.39 |
| 192.168.40.40 | 192.168.40.41 | 192.168.40.46 | 192.168.40.47 |
| 192.168.40.48 | 192.168.40.49 | 192.168.40.54 | 192.168.40.55 |
| 192.168.40.56 | 192.168.40.57 | 192.168.40.62 | 192.168.40.63 |
| 192.168.40.64 | 192.168.40.65 | 192.168.40.70 | 192.168.40.71 |
| 192.168.40.72 | 192.168.40.73 | 192.168.40.78 | 192.168.40.79 |
| 192.168.40.80 | 192.168.40.81 | 192.168.40.86 | 192.168.40.87 |
| 192.168.40.88 | 192.168.40.89 | 192.168.40.94 | 192.168.40.95 |
| 192.168.40.96 | 192.168.40.97 | 192.168.40.102 | 192.168.40.103 |
| 192.168.40.104 | 192.168.40.105 | 192.168.40.110 | 192.168.40.111 |
| 192.168.40.112 | 192.168.40.113 | 192.168.40.118 | 192.168.40.119 |
| 192.168.40.120 | 192.168.40.121 | 192.168.40.126 | 192.168.40.127 |
| 192.168.40.128 | 192.168.40.129 | 192.168.40.134 | 192.168.40.135 |
| 192.168.40.136 | 192.168.40.137 | 192.168.40.142 | 192.168.40.143 |
| 192.168.40.144 | 192.168.40.145 | 192.168.40.150 | 192.168.40.151 |
| 192.168.40.152 | 192.168.40.153 | 192.168.40.158 | 192.168.40.159 |
| 192.168.40.160 | 192.168.40.161 | 192.168.40.166 | 192.168.40.167 |
| 192.168.40.168 | 192.168.40.169 | 192.168.40.174 | 192.168.40.175 |
| 192.168.40.176 | 192.168.40.177 | 192.168.40.182 | 192.168.40.183 |
| 192.168.40.184 | 192.168.40.185 | 192.168.40.190 | 192.168.40.191 |
| 192.168.40.192 | 192.168.40.193 | 192.168.40.198 | 192.168.40.199 |
| 192.168.40.200 | 192.168.40.201 | 192.168.40.206 | 192.168.40.207 |
| 192.168.40.208 | 192.168.40.209 | 192.168.40.214 | 192.168.40.215 |
| 192.168.40.216 | 192.168.40.217 | 192.168.40.222 | 192.168.40.223 |
| 192.168.40.224 | 192.168.40.225 | 192.168.40.230 | 192.168.40.231 |
| 192.168.40.232 | 192.168.40.233 | 192.168.40.238 | 192.168.40.239 |
| 192.168.40.240 | 192.168.40.241 | 192.168.40.246 | 192.168.40.247 |
| 192.168.40.248 | 192.168.40.249 | 192.168.40.254 | 192.168.40.255 |

**IP Address: 172.100.0.0/22**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 172 | . | 100 | . | 0 | . | 0 |
| 10101100 | . | 01100100 | . | 11111100 | . | 00000000 |

Class of IP Address: **B**

No. of Subnet: 2n = 26 = 64

No. of Host bit: 232-22 = 10

Subnet Size: 2h = 210 = 1024

No. of Total Valid Host Per Subnet: 2h -2 = 1022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Network Address** | **First Valid IP** | **Last Valid IP** | **Broadcast Address** | **Subnet Mask** |
| 172.100.0.0 | 172.100.0.1 | 172.100.3.254 | 172.100.3.255 | 255.255.252.0 |
| 172.100.4.0 | 172.100.4.1 | 172.100.7.254 | 172.100.7.255 |
| . |  |  |  |
| . |  |  |  |
| . |  |  |  |
| 172.100.252.0 | 172.100.252.1 | 172.100.255.254 | 172.100.255.255 |