

172.16.0.0

/16 or  $2^{16}$  One Subnet

11111111.11111111.00000000.00000000

255.255.0.0

$2^{16}$  Host

/18 or  $2^{18}$

11111111.11111111.11000000.00000000

255.255.192.0

$2^{14}$  Host

Network Address	Usable Host Range	Broadcast Address:
172.16.0.0	172.16.0.1 - 172.16.63.254	172.16.63.255
172.16.64.0	172.16.64.1 - 172.16.127.254	172.16.127.255
172.16.128.0	172.16.128.1 - 172.16.191.254	172.16.191.255
172.16.192.0	172.16.192.1 - 172.16.255.254	172.16.255.255

/20 or  $2^{20}$

11111111.11111111.11110000.00000000

255.255.240.0

$2^{12}$  Host

Network Address	Usable Host Range	Broadcast Address:
172.16.0.0	172.16.0.1 - 172.16.15.254	172.16.15.255
172.16.16.0	172.16.16.1 - 172.16.31.254	172.16.31.255
172.16.32.0	172.16.32.1 - 172.16.47.254	172.16.47.255
172.16.48.0	172.16.48.1 - 172.16.63.254	172.16.63.255
172.16.64.0	172.16.64.1 - 172.16.79.254	172.16.79.255
172.16.80.0	172.16.80.1 - 172.16.95.254	172.16.95.255
172.16.96.0	172.16.96.1 - 172.16.111.254	172.16.111.255
172.16.112.0	172.16.112.1 - 172.16.127.254	172.16.127.255
172.16.128.0	172.16.128.1 - 172.16.143.254	172.16.143.255
172.16.144.0	172.16.144.1 - 172.16.159.254	172.16.159.255
172.16.160.0	172.16.160.1 - 172.16.175.254	172.16.175.255
172.16.176.0	172.16.176.1 - 172.16.191.254	172.16.191.255
172.16.192.0	172.16.192.1 - 172.16.207.254	172.16.207.255
172.16.208.0	172.16.208.1 - 172.16.223.254	172.16.223.255
172.16.224.0	172.16.224.1 - 172.16.239.254	172.16.239.255
172.16.240.0	172.16.240.1 - 172.16.255.254	172.16.255.255

/22 or  $2^{22}$

11111111.11111111.11111100.00000000

255.255.252.0

$2^{10}$  Host

Network Address	Usable Host Range	Broadcast Address:
172.16.0.0	172.16.0.1 - 172.16.3.254	172.16.3.255
172.16.4.0	172.16.4.1 - 172.16.7.254	172.16.7.255
172.16.8.0	172.16.8.1 - 172.16.11.254	172.16.11.255
172.16.12.0	172.16.12.1 - 172.16.15.254	172.16.15.255
172.16.16.0	172.16.16.1 - 172.16.19.254	172.16.19.255
172.16.20.0	172.16.20.1 - 172.16.23.254	172.16.23.255
172.16.24.0	172.16.24.1 - 172.16.27.254	172.16.27.255
172.16.28.0	172.16.28.1 - 172.16.31.254	172.16.31.255
172.16.32.0	172.16.32.1 - 172.16.35.254	172.16.35.255
172.16.36.0	172.16.36.1 - 172.16.39.254	172.16.39.255
172.16.40.0	172.16.40.1 - 172.16.43.254	172.16.43.255
172.16.44.0	172.16.44.1 - 172.16.47.254	172.16.47.255
172.16.48.0	172.16.48.1 - 172.16.51.254	172.16.51.255
172.16.52.0	172.16.52.1 - 172.16.55.254	172.16.55.255
172.16.56.0	172.16.56.1 - 172.16.59.254	172.16.59.255
172.16.60.0	172.16.60.1 - 172.16.63.254	172.16.63.255
172.16.64.0	172.16.64.1 - 172.16.67.254	172.16.67.255
172.16.68.0	172.16.68.1 - 172.16.71.254	172.16.71.255
172.16.72.0	172.16.72.1 - 172.16.75.254	172.16.75.255
172.16.76.0	172.16.76.1 - 172.16.79.254	172.16.79.255
172.16.80.0	172.16.80.1 - 172.16.83.254	172.16.83.255
172.16.84.0	172.16.84.1 - 172.16.87.254	172.16.87.255
172.16.88.0	172.16.88.1 - 172.16.91.254	172.16.91.255
172.16.92.0	172.16.92.1 - 172.16.95.254	172.16.95.255
172.16.96.0	172.16.96.1 - 172.16.99.254	172.16.99.255
172.16.100.0	172.16.100.1 - 172.16.103.254	172.16.103.255
172.16.104.0	172.16.104.1 - 172.16.107.254	172.16.107.255
172.16.108.0	172.16.108.1 - 172.16.111.254	172.16.111.255
172.16.112.0	172.16.112.1 - 172.16.115.254	172.16.115.255
172.16.116.0	172.16.116.1 - 172.16.119.254	172.16.119.255
172.16.120.0	172.16.120.1 - 172.16.123.254	172.16.123.255
172.16.124.0	172.16.124.1 - 172.16.127.254	172.16.127.255
172.16.128.0	172.16.128.1 - 172.16.131.254	172.16.131.255
172.16.132.0	172.16.132.1 - 172.16.135.254	172.16.135.255

172.16.136.0	172.16.136.1 - 172.16.139.254	172.16.139.255
172.16.140.0	172.16.140.1 - 172.16.143.254	172.16.143.255
172.16.144.0	172.16.144.1 - 172.16.147.254	172.16.147.255
172.16.148.0	172.16.148.1 - 172.16.151.254	172.16.151.255
172.16.152.0	172.16.152.1 - 172.16.155.254	172.16.155.255
172.16.156.0	172.16.156.1 - 172.16.159.254	172.16.159.255
172.16.160.0	172.16.160.1 - 172.16.163.254	172.16.163.255
172.16.164.0	172.16.164.1 - 172.16.167.254	172.16.167.255
172.16.168.0	172.16.168.1 - 172.16.171.254	172.16.171.255
172.16.172.0	172.16.172.1 - 172.16.175.254	172.16.175.255
172.16.176.0	172.16.176.1 - 172.16.179.254	172.16.179.255
172.16.180.0	172.16.180.1 - 172.16.183.254	172.16.183.255
172.16.184.0	172.16.184.1 - 172.16.187.254	172.16.187.255
172.16.188.0	172.16.188.1 - 172.16.191.254	172.16.191.255
172.16.192.0	172.16.192.1 - 172.16.195.254	172.16.195.255
172.16.196.0	172.16.196.1 - 172.16.199.254	172.16.199.255
172.16.200.0	172.16.200.1 - 172.16.203.254	172.16.203.255
172.16.204.0	172.16.204.1 - 172.16.207.254	172.16.207.255
172.16.208.0	172.16.208.1 - 172.16.211.254	172.16.211.255
172.16.212.0	172.16.212.1 - 172.16.215.254	172.16.215.255
172.16.216.0	172.16.216.1 - 172.16.219.254	172.16.219.255
172.16.220.0	172.16.220.1 - 172.16.223.254	172.16.223.255
172.16.224.0	172.16.224.1 - 172.16.227.254	172.16.227.255
172.16.228.0	172.16.228.1 - 172.16.231.254	172.16.231.255
172.16.232.0	172.16.232.1 - 172.16.235.254	172.16.235.255
172.16.236.0	172.16.236.1 - 172.16.239.254	172.16.239.255
172.16.240.0	172.16.240.1 - 172.16.243.254	172.16.243.255
172.16.244.0	172.16.244.1 - 172.16.247.254	172.16.247.255
172.16.248.0	172.16.248.1 - 172.16.251.254	172.16.251.255
172.16.252.0	172.16.252.1 - 172.16.255.254	172.16.255.255

10.0.0.0

/8 or  $2^8$  One Subnet

11111111.00000000.00000000.00000000

255.0.0.0

$2^{24}$  Host

/16 or  $2^{16}$

11111111.11111111.00000000.00000000

255.255.0.0

$2^{16}$  Host

/24 or  $2^{24}$

11111111.11111111.11111111.00000000

255.255.255.0

$2^8$  Host

/28 or  $2^{28}$

11111111.11111111.11111111.11110000

255.255.255.240

$2^4$  Host

210.23.67.102  
 66.23.148.0  
 158.23.251.33  
 144.23.117.254  
 192.254.23.123  
 144.207.78.1  
 63.125.23.211  
 192.25.128.36  
 128.12.254.98  
 134.223.156.89  
 127.0.0.1  
 224.23.108.23  
 223.78.27.144  
 77.123.28.167  
 191.249.222.234

<b>Scenario 1</b>	
Required Number of Physical Segments:	5
Maximum Number of Hosts/Physical Segment:	5000
Network Address:	153.61.0.0
Proposed Custom Subnet Mask:	255.255.224.0
Number of Subnets Supported:	6
Maximum Number of Host ID per Subnet:	8190

<b>Scenario 2</b>	
Required Number of Physical Segments:	100
Maximum Number of Hosts/Physical Segment:	88,000
Network Address:	39.0.0.0
Proposed Custom Subnet Mask:	
Number of Subnets Supported:	
Maximum Number of Host ID per Subnet:	

<b>Scenario 3</b>	
Required Number of Physical Segments:	100
Maximum Number of Hosts/Physical Segment:	350
Network Address:	177.133.0.0
Proposed Custom Subnet Mask:	

Number of Subnets Supported:	
Maximum Number of Host ID per Subnet:	

<b>Scenario 4</b>	
Required Number of Physical Segments:	4
Maximum Number of Hosts/Physical Segment:	1,500,000
Network Address:	120.0.0.0
Proposed Custom Subnet Mask:	
Number of Subnets Supported:	
Maximum Number of Host ID per Subnet:	

<b>Scenario 5</b>	
Required Number of Physical Segments:	16
Maximum Number of Hosts/Physical Segment:	1,500
Network Address:	128.199.0.0
Proposed Custom Subnet Mask:	
Number of Subnets Supported:	
Maximum Number of Host ID per Subnet:	

<b>Scenario 6</b>	
Required Number of Physical Segments:	250
Maximum Number of Hosts/Physical Segment:	100
Network Address:	191.254.0.0
Proposed Custom Subnet Mask:	
Number of Subnets Supported:	
Maximum Number of Host ID per Subnet:	

<b>Scenario 7</b>	
Required Number of Physical Segments:	12
Maximum Number of Hosts/Physical Segment:	12
Network Address:	216.122.44.0
Proposed Custom Subnet Mask:	
Number of Subnets Supported:	
Maximum Number of Host ID per Subnet:	

<b>Scenario 8</b>	
Required Number of Physical Segments:	10
Maximum Number of Hosts/Physical Segment:	750,000
Network Address:	12.0.0.0
Proposed Custom Subnet Mask:	
Number of Subnets Supported:	
Maximum Number of Host ID per Subnet:	

<b>Scenario 9</b>	
Required Number of Physical Segments:	50
Maximum Number of Hosts/Physical Segment:	600
Network Address:	134.119.0.0
Proposed Custom Subnet Mask:	
Number of Subnets Supported:	
Maximum Number of Host ID per Subnet:	

<b>Scenario 10</b>	
Required Number of Physical Segments:	5
Maximum Number of Hosts/Physical Segment:	25
Network Address:	192.177.4.0
Proposed Custom Subnet Mask:	
Number of Subnets Supported:	
Maximum Number of Host ID per Subnet:	