

Working With Class B Address 128.10.0.0

Max # Of Subnets	Min # Of Bits	Subnet #	Host #	Max # Of Hosts	128.10.x.y
200	8	193	129	254	128.10.193.129

200 Subnets							
Network ID			Subnet		Host		
NNNN	NNNN	NNNN	NNNN	SSSS	SSSS	HHHH	HHHH
1000	0000	0000	1010	1100	0001	1000	0001
128		10		193		129	

128	64	32	16	8	4	2	1
1	1	0	0	0	0	0	1
1	0	0	0	0	0	0	1

Subnet Mask						
Network ID			Subnet		Host	
1111	1111	1111	1111	1111	0000	0000
255		255		255		0

124

# Of Bits	Max # Of Subnets
2	$2^2 - 2 = 2$
3	$2^3 - 2 = 6$
4	$2^4 - 2 = 14$
5	$2^5 - 2 = 30$
6	$2^6 - 2 = 62$
7	$2^7 - 2 = 126$
8	$2^8 - 2 = 254$
9	$2^9 - 2 = 510$
10	$2^{10} - 2 = 1022$
11	$2^{11} - 2 = 2046$
12	$2^{12} - 2 = 4094$
13	$2^{13} - 2 = 8190$
14	$2^{14} - 2 = 16382$

Working With Class B Address 128.10.0.0

Max # Of Subnets	Min # Of Bits	Subnet #	Host #	Max # Of Hosts	128.10.x.y
120	7	119	68	510	128.10.238.68

120 Subnets					
Network ID			Subnet/Host		Host
NNNN	NNNN	NNNN	NNNN	SSSS	SSSH
1000	0000	0000	1010	1110	110
128		10		238	68

256	128	64	32	16	8	4	2	1
0	0	1	0	0	0	1	1	0

Subnet Mask					
Network ID			Subnet/Host		Host
1111	1111	1111	1111	1110	0000
255		255		254	0

# Of Bits	Max # Of Subnets
2	$2^2 - 2 = 2$
3	$2^3 - 2 = 6$
4	$2^4 - 2 = 14$
5	$2^5 - 2 = 30$
6	$2^6 - 2 = 62$
7	$2^7 - 2 = 126$
8	$2^8 - 2 = 254$
9	$2^9 - 2 = 510$
10	$2^{10} - 2 = 1022$
11	$2^{11} - 2 = 2046$
12	$2^{12} - 2 = 4094$
13	$2^{13} - 2 = 8190$
14	$2^{14} - 2 = 16382$

Working With Class B Address 128.10.0.0

Max # Of Subnets	Min # Of Bits	Subnet #	Host #	Max # Of Hosts	128.10.x.y
120	7	105	352	510	128.10.211.96

120 Subnets					
Network ID			Subnet/Host		Host
NNNN	NNNN	NNNN	NNNN	SSSS	SSSH
1000	0000	0000	1010	1101	0011
128		10		211	96

256	128	64	32	16	8	4	2	1
		1	1	0	1	0	0	1
1	0	1	1	0	0	0	0	0

Subnet Mask					
Network ID			Subnet/Host		Host
1111	1111	1111	1111	1110	0000
255		255		254	0

123

# Of Bits	Max # Of Subnets
2	$2^2 - 2 = 2$
3	$2^3 - 2 = 6$
4	$2^4 - 2 = 14$
5	$2^5 - 2 = 30$
6	$2^6 - 2 = 62$
7	$2^7 - 2 = 126$
8	$2^8 - 2 = 254$
9	$2^9 - 2 = 510$
10	$2^{10} - 2 = 1022$
11	$2^{11} - 2 = 2046$
12	$2^{12} - 2 = 4094$
13	$2^{13} - 2 = 8190$
14	$2^{14} - 2 = 16382$

Working With Class B Address 128.10.0.0

Max # Of Subnets	Min # Of Bits	Subnet #	Host #	Max # Of Hosts	128.10.x.y
58	6	45	98	1022	128.10.180.98

58 Subnets							
Network ID			Subnet/Host		Host		
NNNN	NNNN	NNNN	NNNN	SSSS	SSHH	HHHH	HHHH
1000	0000	0000	1010	1011	0100	0110	0010
128		10		180		98	

512	256	128	64	32	16	8	4	2	1
0000				1	0	1	1	0	1
0	0	0	1	1	0	0	0	1	0

Subnet Mask							
Network ID			Subnet/Host		Host		
1111	1111	1111	1111	1100	0000	0000	
255		255		252		0	

122

# Of Bits	Max # Of Subnets
2	$2^2 - 2 = 2$
3	$2^3 - 2 = 6$
4	$2^4 - 2 = 14$
5	$2^5 - 2 = 30$
6	$2^6 - 2 = 62$
7	$2^7 - 2 = 126$
8	$2^8 - 2 = 254$
9	$2^9 - 2 = 510$
10	$2^{10} - 2 = 1022$
11	$2^{11} - 2 = 2046$
12	$2^{12} - 2 = 4094$
13	$2^{13} - 2 = 8190$
14	$2^{14} - 2 = 16382$

Working With Class B Address 128.10.0.0

Max # Of Subnets	Min # Of Bits	Subnet #	Host #	Max # Of Hosts	128.10.x.y
58	6	48	598	1022	128.10.194.86

58 Subnets							
Network ID			Subnet/Host		Host		
NNNN	NNNN	NNNN	NNNN	SSSS	SSHH	HHHH	HHHH
1000	0000	0000	1010	1100	0010	0101	0110
128		10		194		86	

512	256	128	64	32	16	8	4	2	1
				1	1	0	0	0	0
1	0	0	1	1	1	0	1	1	0

Subnet Mask						
Network ID			Subnet/Host		Host	
1111	1111	1111	1111	1100	0000	0000
255		255		252		0

122

# Of Bits	Max # Of Subnets
2	$2^2 - 2 = 2$
3	$2^3 - 2 = 6$
4	$2^4 - 2 = 14$
5	$2^5 - 2 = 30$
6	$2^6 - 2 = 62$
7	$2^7 - 2 = 126$
8	$2^8 - 2 = 254$
9	$2^9 - 2 = 510$
10	$2^{10} - 2 = 1022$
11	$2^{11} - 2 = 2046$
12	$2^{12} - 2 = 4094$
13	$2^{13} - 2 = 8190$
14	$2^{14} - 2 = 16382$

Working With Class B Address 128.10.0.0

Max # Of Subnets	Min # Of Bits	Subnet #	Host #	Max # Of Hosts	128.10.x.y
29	5	28	59	2046	128.10.224.59

29 Subnets							
Network ID			Subnet/Host		Host		
NNNN	NNNN	NNNN	NNNN	SSSS	SHHH	HHHH	HHHH
1000	0000	0000	1010	1110	0000	0011	1011
128		10		224		59	

1024	512	256	128	64	32	16	8	4	2	1
						1	1	1	0	0
0	0	0	0	0	1	1	1	0	1	1

Subnet Mask							
Network ID			Subnet/Host		Host		
1111	1111	1111	1111	1111	1000	0000	0000
255		255		248		0	

121

# Of Bits	Max # Of Subnets
2	$2^2 - 2 = 2$
3	$2^3 - 2 = 6$
4	$2^4 - 2 = 14$
5	$2^5 - 2 = 30$
6	$2^6 - 2 = 62$
7	$2^7 - 2 = 126$
8	$2^8 - 2 = 254$
9	$2^9 - 2 = 510$
10	$2^{10} - 2 = 1022$
11	$2^{11} - 2 = 2046$
12	$2^{12} - 2 = 4094$
13	$2^{13} - 2 = 8190$
14	$2^{14} - 2 = 16382$

Working With Class B Address 128.10.0.0

Max # Of Subnets	Min # Of Bits	Subnet #	Host #	Max # Of Hosts	128.10.x.y
29	5	25	1069	2046	128.10.204.45

29 Subnets					
Network ID			Subnet/Host		Host
NNNN	NNNN	NNNN	NNNN	SSSS SHHH	HHHH HHHH
1000	0000	0000	1010	(1100)100	00101101
128		10		204	45

1024	512	256	128	64	32	16	8	4	2	1
						1	1	0	0	1
1	0	0	0	0	1	0	1	1	0	1

Subnet Mask					
Network ID			Subnet/Host		Host
1111	1111	1111	1111	1000	0000 0000
255		255		248	0

121

# Of Bits	Max # Of Subnets
2	$2^2 - 2 = 2$
3	$2^3 - 2 = 6$
4	$2^4 - 2 = 14$
5	$2^5 - 2 = 30$
6	$2^6 - 2 = 62$
7	$2^7 - 2 = 126$
8	$2^8 - 2 = 254$
9	$2^9 - 2 = 510$
10	$2^{10} - 2 = 1022$
11	$2^{11} - 2 = 2046$
12	$2^{12} - 2 = 4094$
13	$2^{13} - 2 = 8190$
14	$2^{14} - 2 = 16382$

Working With Class A Address 9.0.0.0

Max # Of Subnets	Min # Of Bits	Subnet #	Host #	Max # Of Hosts	128.10.x.y
2000	11	1953	1119	8190	9.244.36.95

2000 Subnets							
Network ID		Subnet		Subnet/Host		Host	
NNNN	NNNN	SSSS	SSSS	SSSH	HHHH	HHHH	HHHH
0000	1001	1111	0100	0010	0100	0101	1111
9		244		36		95	

4096	2048	1024	512	256	128	64	32	16	8	4	2	1
		1	1	1	1	0	1	0	0	0	0	1
0	0	1	0	0	0	1	0	1	1	1	1	1

Subnet Mask							
NETWORK		SUBNET		Subnet/Host		Host	
1111	1111	1111	1111	1110	0000	0000	0000
255		255		224		0	

/19

# Of Bits	Max # Of Subnets
2	$2^2 - 2 = 2$
3	$2^3 - 2 = 6$
4	$2^4 - 2 = 14$
5	$2^5 - 2 = 30$
6	$2^6 - 2 = 62$
7	$2^7 - 2 = 126$
8	$2^8 - 2 = 254$
9	$2^9 - 2 = 510$
10	$2^{10} - 2 = 1022$
11	$2^{11} - 2 = 2046$
12	$2^{12} - 2 = 4094$
13	$2^{13} - 2 = 8190$
14	$2^{14} - 2 = 16382$



Working With Class A Address 9.0.0.0

1949  
 1024  
 ---  
 925  
 512  
 ---  
 413  
 256  
 ---  
 157  
 128  
 ---  
 29  
 16  
 ---  
 13

Max # Of Subnets	Min # Of Bits	Subnet #	Host #	Max # Of Hosts	128.10.x.y
2000	11	1949	704	8190	9.227.162.192

704  
 512  
 ---  
 192

2000 Subnets			
Network ID	Subnet	Subnet/Host	Host
NNNN NNNN	SSSS SSSS	SSSH HHHH	HHHH HHHH
0000 1001	1111 0011	1010 0010	1100 0000
9	227	162	192

4096	2048	1024	512	256	128	64	32	16	8	4	2	1
		1	1	1	1	0	0	1	1	1	0	1
0	0	0	1	0	1	1	0	0	0	0	0	0

Subnet Mask			
Network ID	Subnet	Subnet/Host	Host
1111 1111	1111 1111	1110 0000	0000 0000
255	255	224	0

# Of Bits	Max # Of Subnets
2	$2^2 - 2 = 2$
3	$2^3 - 2 = 6$
4	$2^4 - 2 = 14$
5	$2^5 - 2 = 30$
6	$2^6 - 2 = 62$
7	$2^7 - 2 = 126$
8	$2^8 - 2 = 254$
9	$2^9 - 2 = 510$
10	$2^{10} - 2 = 1022$
11	$2^{11} - 2 = 2046$
12	$2^{12} - 2 = 4094$
13	$2^{13} - 2 = 8190$
14	$2^{14} - 2 = 16382$