

Working With Class B Address **128.10.0.0**

Max # Of Subnets	# Of Bits	Subnet #	Host #	Max # Of Hosts	128.10.X.Y
200		193	129		

200 Subnets			
Network ID		Subnet	Host
NNNN NNNN	NNNN NNNN	SSSS SSSS	HHHH HHHH
1000 0000	0000 1010		
128	10		

128	64	32	16	8	4	2	1

Subnet Mask			
Network ID		Subnet	Host
1111 1111	1111 1111	1111 1111	0000 0000
255	255	255	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	$2^{13} - 2 = 8190$

Working With Class B Address **128.10.0.0**

Max # Of Subnets	# Of Bits	Subnet #	Host #	Max # Of Hosts	128.10.X.Y
120		119	68		
120		105	352		

120 Subnets			
Network ID		Subnet/Host	Host
NNNN NNNN	NNNN NNNN	SSSS SSHH	HHHH HHHH
1000 0000	0000 1010		
128	10		

256	128	64	32	16	8	4	2	1

120 Subnets			
Network ID		Subnet/Host	Host
NNNN NNNN	NNNN NNNN	SSSS SSHH	HHHH HHHH
1000 0000	0000 1010		
128	10		

256	128	64	32	16	8	4	2	1

Subnet Mask			
Network ID		Subnet/Host	Host
1111 1111	1111 1111	1111 1110	0000 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	$2^{13} - 2 = 8190$

Working With Class B Address **128.10.0.0**

Max # Of Subnets	# Of Bits	Subnet #	Host #	Max # Of Hosts	128.10.X.Y
58		45	98		
58		48	598		

58 Subnets			
Network ID		Subnet/Host	Host
NNNN NNNN	NNNN NNNN	SSSS SSHH	HHHH HHHH
1000 0000	0000 1010		
128	10		

512	256	128	64	32	16	8	4	2	1

58 Subnets			
Network ID		Subnet/Host	Host
NNNN NNNN	NNNN NNNN	SSSS SSHH	HHHH HHHH
1000 0000	0000 1010		
128	10		

512	256	128	64	32	16	8	4	2	1

Subnet Mask			
Network ID		Subnet/Host	Host
1111 1111	1111 1111	1111 1100	0000 0000
255	255	252	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	$2^{13} - 2 = 8190$

Working With Class B Address **128.10.0.0**

Max # Of Subnets	# Of Bits	Subnet #	Host #	Max # Of Hosts	128.10.X.Y
29		28	59		
29		25	1069		

29 Subnets			
Network ID		Subnet/Host	Host
NNNN NNNN	NNNN NNNN	SSSH HHHH	HHHH HHHH
1000 0000	0000 1010		
128	10		

1024	512	256	128	64	32	16	8	4	2	1

29 Subnets			
Network ID		Subnet/Host	Host
NNNN NNNN	NNNN NNNN	SSSS SHHH	HHHH HHHH
1000 0000	0000 1010		
128	10		

1024	512	256	128	64	32	16	8	4	2	1

Subnet Mask			
ID Network	Subnet/Host	Host	
1111 1111	1111 1111	1111 1000	0000 0000
255	255	248	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	$2^{13} - 2 = 8190$

Working With Class A Address **9.0.0.0**

Max # Of Subnets	# Of Bits	Subnet #	Host #	Max # Of Hosts	128.10.X.Y
2000		1953	1119		
2000		1949	704		

2000 Subnets			
Network ID	Subnet	Subnet/Host	Host
NNNN NNNN	SSSS SSSS	SSSH HHHH	HHHH HHHH
0000 1001			
9			

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

2000 Subnets			
Network ID	Subnet	Subnet/Host	Host
NNNN NNNN	SSSS SSSS	SSSH HHHH	HHHH HHHH
0000 1001			
9			

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

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	$2^{13} - 2 = 8190$