

Subnetting															
CIDR prefix length	Dotted Decimal Netmask	Hexidecimal Netmask	Inverse Netmask	Binary								Number of Classfull Networks	Number of Usable IPs		
/1	128.0.0.0	80 00 00 00	127.255.255.255	1000	0000	0000	0000	0000	0000	0000	0000	0000	128 As	2,147,483,646	
/2	192.0.0.0	C0 00 00 00	63.255.255.255	1100	0000	0000	0000	0000	0000	0000	0000	0000	64 As	1,073,741,822	
/3	224.0.0.0	E0 00 00 00	31.255.255.255	1110	0000	0000	0000	0000	0000	0000	0000	0000	32 As		
/4	240.0.0.0	F0 00 00 00	15.255.255.255	1111	0000	0000	0000	0000	0000	0000	0000	0000	16 As	268,435,454	
/5	248.0.0.0	F8 00 00 00	7.255.255.255	1111	1000	0000	0000	0000	0000	0000	0000	0000	8 As	134,217,726	
/6	252.0.0.0	FC 00 00 00	3.255.255.255	1111	1100	0000	0000	0000	0000	0000	0000	0000	4 As	67,108,862	
/7	254.0.0.0	FE 00 00 00	1.255.255.255	1111	1110	0000	0000	0000	0000	0000	0000	0000	2 As	33,554,430	
/8	255.0.0.0	FF 00 00 00	0.255.255.255	1111	1111	0000	0000	0000	0000	0000	0000	0000	1 A or 256 Bs	16,777,214	
/9	255.128.0.0	FF 80 00 00	0.127.255.255	1111	1111	1000	0000	0000	0000	0000	0000	0000	128 Bs	8,388,606	
/10	255.192.0.0	FF C0 00 00	0.63.255.255	1111	1111	1100	0000	0000	0000	0000	0000	0000	64 Bs	4,194,302	
/11	255.224.0.0	FF E0 00 00	0.31.255.255	1111	1111	1110	0000	0000	0000	0000	0000	0000	32 Bs	2,097,150	
/12	255.240.0.0	FF F0 00 00	0.15.255.255	1111	1111	1111	0000	0000	0000	0000	0000	0000	16 Bs	1,048,574	
/13	255.248.0.0	FF F8 00 00	0.7.255.255	1111	1111	1111	1000	0000	0000	0000	0000	0000	8 Bs	524,286	
/14	255.252.0.0	FF FC 00 00	0.3.255.255	1111	1111	1111	1100	0000	0000	0000	0000	0000	4 Bs	262,142	
/15	255.254.0.0	FF FE 00 00	0.1.255.255	1111	1111	1111	1110	0000	0000	0000	0000	0000	2 Bs	131,070	
/16	255.255.0.0	FF FF 00 00	0.0.255.255	1111	1111	1111	1111	0000	0000	0000	0000	0000	1 B or 256 Cs	65,534	
/17	255.255.128.0	FF FF 80 00	0.0.127.255	1111	1111	1111	1111	1000	0000	0000	0000	0000	128 Cs	32,766	
/18	255.255.192.0	FF FF C0 00	0.0.63.255	1111	1111	1111	1111	1100	0000	0000	0000	0000	64 Cs	16,382	
/19	255.255.224.0	FF FF E0 00	0.0.31.255	1111	1111	1111	1111	1110	0000	0000	0000	0000	32 Cs	8,190	
/20	255.255.240.0	FF FF F0 00	0.0.15.255	1111	1111	1111	1111	1111	0000	0000	0000	0000	16 Cs	4,094	
/21	255.255.248.0	FF FF F8 00	0.0.7.255	1111	1111	1111	1111	1111	1000	0000	0000	0000	8 Cs	2,046	
/22	255.255.252.0	FF FF FC 00	0.0.3.255	1111	1111	1111	1111	1111	1100	0000	0000	0000	4 Cs	1,022	
/23	255.255.254.0	FF FF FE 00	0.0.1.255	1111	1111	1111	1111	1111	1110	0000	0000	0000	2 Cs	510	
/24	255.255.255.0	FF FF FF 00	0.0.0.255	1111	1111	1111	1111	1111	1111	0000	0000	0000	1 C	254	
/25	255.255.255.128	FF FF FF 80	0.0.0.127	1111	1111	1111	1111	1111	1111	1000	0000	0000	1/2 C	126	
/26	255.255.255.192	FF FF FF C0													

Class	Start	End	Number of IPs	Comment
A	10.0.0.0	10.255.255.255	16,777,216	A single Class A network number
B	172.16.0.0	172.31.255.255	1,048,544	16 contiguous Class B network numbers
C	192.168.0.0	192.168.255.255	65,534	256 contiguous Class C network numbers