

CIDR / IPv4 Subnet Cheat Sheet

Quick reference for CIDR prefix lengths, dotted-decimal subnet masks, total addresses, and usable host addresses.

Small Networks (/24 to /32)			
CIDR	Subnet Mask	Total IPs	Usable IPs
/32	255.255.255.255	1	1
/31	255.255.255.254	2	2
/30	255.255.255.252	4	2
/29	255.255.255.248	8	6
/28	255.255.255.240	16	14
/27	255.255.255.224	32	30
/26	255.255.255.192	64	62
/25	255.255.255.128	128	126
/24	255.255.255.0	256	254

Medium Networks (/17 to /23)			
CIDR	Subnet Mask	Total IPs	Usable IPs
/23	255.255.254.0	512	510
/22	255.255.252.0	1,024	1,022
/21	255.255.248.0	2,048	2,046
/20	255.255.240.0	4,096	4,094
/19	255.255.224.0	8,192	8,190
/18	255.255.192.0	16,384	16,382
/17	255.255.128.0	32,768	32,766

Large Networks (/8 to /16)

CIDR	Subnet Mask	Total IPs	Usable IPs
/16	255.255.0.0	65,536	65,534
/15	255.254.0.0	131,072	131,070
/14	255.252.0.0	262,144	262,142
/13	255.248.0.0	524,288	524,286
/12	255.240.0.0	1,048,576	1,048,574
/11	255.224.0.0	2,097,152	2,097,150
/10	255.192.0.0	4,194,304	4,194,302
/9	255.128.0.0	8,388,608	8,388,606
/8	255.0.0.0	16,777,216	16,777,214

Note: For traditional IPv4 subnets, usable host addresses are normally the total addresses minus the network and broadcast addresses. The /31 and /32 entries are special cases commonly used for point-to-point links and individual host/router addressing, respectively.