Subnetting

	The Cyber Mentor's Subnetting Sheet							
	Subnet x.0.0.0							
CIDR	/1	/2	/3	/4	/5	/6	/7	/8
Hosts	2,147,483,648	1,073,741,824	536,870,912	268,435,456	134,217,728	67,108,864	33,554,432	16,777,216
Class A	Subnet 255.x.0.0							
CIDR	/9	/10	/11	/12	/13	/14	/15	/16
Hosts	8,388,608	4,194,304	2,097,152	1,048,576	524,288	262,144	131,072	65,536
Class B	Subnet 255.255.x.0							
CIDR	/17	/18	/19	/20	/21	/22	/23	/24
Hosts	32,768	16,384	8,192	4,096	2,048	1,024	512	256
Class C	Subnet 255.255.255.x							
CIDR	/25	/26	/27	/28	/29	/30	/31	/32
Hosts	128	64	32	16	8	4	2	1
Subnet Mask (Replace x)	128	192	224	240	248	252	254	255

Notes:
*Hosts double each increment of a CIDR
*Always subtract 2 from host total:
Network ID - First Address
Broadcast - Last Address

Network ID - It is the first address available in the Ip range.

Broadcast - It is the last address available in the Ip range.

192.168.0.0/19 - Subnet: 255.255.224.0 - Hosts Number: 8192 - Network ID :192.168.0.0 - Broadcast: 192.168.31.255

192.168.0.0/22 - Subnet: 255.255.252.0 - Hosts Number: 1022 - Network ID: 192.168.0.0 - Broadcast: 192.168.3.255

192.168.1.0/26 - Subnet: 255.255.255.192 - Hosts Number: 62 - Network ID: 192.168.1.0 - Broadcast: 192.168.1.63

192.168.1.0/27 - Subnet: 255.255.255.224 - Host Number: 30 - Network ID: 192.168.1.0 - Broadcast: 192.168.1.31