

Class B



- *Class B* addresses are assigned to medium-sized to large-sized networks.
- The two high-order bits in a class B address are always set to binary 1 0.
- The default subnet mask is /16
- Valid network addresses range from 128.0.0.0 to 191.255.0.0 /16
- This allows for 16,384 networks and 65,534 hosts per network.
- This would also be subnetted in a real world environment.

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

- 131.192.0.0/16

Class C



- *Class C* addresses are used for small networks.
- The three high-order bits in a class C address are always set to binary 1 1 0.
- The default subnet mask is /24
- Valid network addresses range from 192.0.0.0 to 223.255.255.0 /24
- This allows for 2,097,152 networks and 254 hosts per network.
- This could be allocated as is for a real world network, or subnetted into smaller subnets.

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

- 195.0.192.0/24

A Quick Note on Private Addresses



- There is also a range of reserved Private Addresses in each class
- These are valid to be assigned to hosts but they are not routable on the public internet
- They were originally designed for hosts in a closed private network with no Internet connectivity
- Class A: 10.0.0.0 to 10.255.255.255
- Class B: 172.16.0.0 to 172.31.255.255
- Class C: 192.168.0.0 to 192.168.255.255
- Private addresses will be discussed in a later lecture in this section