

Subnet Supernet Table for Exams

| Sub Nets | C Hosts | Net Mask | Net Bits | Host Bits | B Hosts |
|----------|---------|----------|----------|-----------|---------|
| 1 | 256 | 0 | 0 | 8 | 65536 |
| 2 | 128 | 128 | 1 | 7 | 32768 |
| 4 | 64 | 192 | 2 | 6 | 16384 |
| 8 | 32 | 224 | 3 | 5 | 8192 |
| 16 | 16 | 240 | 4 | 4 | 4096 |
| 32 | 8 | 248 | 5 | 3 | 2048 |
| 64 | 4 | 252 | 6 | 2 | 1024 |
| 128 | 2 | 254 | 7 | 1 | 512 |
| | + | =256 | + | =8 | C*256 |

How to create the table:

Subnet: 2 – starts at 1 – goes down

C Hosts: 2 – starts at 2 – goes up

Netmask: C Hosts + Netmask = 256

Netbits: 0-7 – goes down

Hostbits: 1-8 – goes up

B Hosts: C Hosts * 256

Examples:

| | Class B | Class C | |
|----------|-------------------|--------------------|-------------|
| Address: | 134.197.40.202/23 | 193.208.102.100/26 | |
| NetBits | 7 | 2 | |
| HostBits | 1 | 6 | |
| NetMask | 254 | 192 | |
| # Hosts: | 512 | 64 | |
| Starting | 134.197.40.0 | 193.208.102.64 | <-- Network |
| Ending | 134.197.41.255 | 193.208.102.127 | <-- Broadca |
| Gateway: | 134.197.40.1 | 193.208.102.65 | <-- Microso |
| | 134.197.41.254 | 193.208.102.126 | <-- Cisco |