Working With Class B Address **128.10.0.0**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Max # Of Subnets | # Of Bits | Subnet # | Host # | Max # Of Hosts | 128.10.X.Y |
| 200 |  | 193 | 129 |  |  |

|  |
| --- |
| 200 Subnets |
| Network ID | Subnet | Host |
| NNNN NNNN | NNNN NNNN | SSSS SSSS | HHHH HHHH |
| 1000 0000 | 0000 1010 |  |  |
| 128 | 10 |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

|  |
| --- |
| Subnet Mask |
| Network ID | Subnet | Host |
| 1111 1111 | 1111 1111 | 1111 1111 | 0000 0000 |
| 255 | 255 | 255 | 0 |

|  |  |
| --- | --- |
| # Of Bits | Max # Of Subnets |
| 2 | 22 – 2 = 2 |
| 3 | 23 – 2 = 6 |
| 4 | 24 – 2 = 14 |
| 5 | 25 – 2 = 30 |
| 6 | 26 – 2 = 62 |
| 7 | 27 – 2 = 126 |
| 8 | 28 – 2 = 254 |
| 9 | 29 – 2 = 510 |
| 10 | 210 – 2 = 1022 |
| 11 | 211 – 2 = 2046 |
| 12 | 212 – 2 = 4094 |
| 13 | 213 – 2 = 8190 |

Working With Class B Address **128.10.0.0**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Max # Of Subnets | # Of Bits | Subnet # | Host # | Max # Of Hosts | 128.10.X.Y |
| 120 |  | 119 | 68 |  |  |
| 120 |  | 105 | 352 |  |  |

|  |
| --- |
| 120 Subnets |
| Network ID | Subnet/Host | Host |
| NNNN NNNN | NNNN NNNN | SSSS SSSH | HHHH HHHH |
| 1000 0000 | 0000 1010 |  |  |
| 128 | 10 |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 256 | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

|  |
| --- |
| 120 Subnets |
| Network ID | Subnet/Host | Host |
| NNNN NNNN | NNNN NNNN | SSSS SSSH | HHHH HHHH |
| 1000 0000 | 0000 1010 |  |  |
| 128 | 10 |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 256 | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

|  |
| --- |
| Subnet Mask |
| Network ID | Subnet/Host | Host |
| 1111 1111 | 1111 1111 | 1111 1110 | 0000 0000 |
| 255 | 255 | 254 | 0 |

|  |  |
| --- | --- |
| # Of Bits | Max # Of Subnets |
| 2 | 22 – 2 = 2 |
| 3 | 23 – 2 = 6 |
| 4 | 24 – 2 = 14 |
| 5 | 25 – 2 = 30 |
| 6 | 26 – 2 = 62 |
| 7 | 27 – 2 = 126 |
| 8 | 28 – 2 = 254 |
| 9 | 29 – 2 = 510 |
| 10 | 210 – 2 = 1022 |
| 11 | 211 – 2 = 2046 |
| 12 | 212 – 2 = 4094 |
| 13 | 213 – 2 = 8190 |

Working With Class B Address **128.10.0.0**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Max # Of Subnets | # Of Bits | Subnet # | Host # | Max # Of Hosts | 128.10.X.Y |
| 58 |  | 45 | 98 |  |  |
| 58 |  | 48 | 598 |  |  |

|  |
| --- |
| 58 Subnets |
| Network ID | Subnet/Host | Host |
| NNNN NNNN | NNNN NNNN | SSSS SSHH | HHHH HHHH |
| 1000 0000 | 0000 1010 |  |  |
| 128 | 10 |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 512 | 256 | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

|  |
| --- |
| 58 Subnets |
| Network ID | Subnet/Host | Host |
| NNNN NNNN | NNNN NNNN | SSSS SSHH | HHHH HHHH |
| 1000 0000 | 0000 1010 |  |  |
| 128 | 10 |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 512 | 256 | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

|  |
| --- |
| Subnet Mask |
| Network ID | Subnet/Host | Host |
| 1111 1111 | 1111 1111 | 1111 1100 | 0000 0000 |
| 255 | 255 | 252 | 0 |

|  |  |
| --- | --- |
| # Of Bits | Max # Of Subnets |
| 2 | 22 – 2 = 2 |
| 3 | 23 – 2 = 6 |
| 4 | 24 – 2 = 14 |
| 5 | 25 – 2 = 30 |
| 6 | 26 – 2 = 62 |
| 7 | 27 – 2 = 126 |
| 8 | 28 – 2 = 254 |
| 9 | 29 – 2 = 510 |
| 10 | 210 – 2 = 1022 |
| 11 | 211 – 2 = 2046 |
| 12 | 212 – 2 = 4094 |
| 13 | 213 – 2 = 8190 |

Working With Class B Address **128.10.0.0**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Max # Of Subnets | # Of Bits | Subnet # | Host # | Max # Of Hosts | 128.10.X.Y |
| 29 |  | 28 | 59 |  |  |
| 29 |  | 25 | 1069 |  |  |

|  |
| --- |
| 29 Subnets |
| Network ID | Subnet/Host | Host |
| NNNN NNNN | NNNN NNNN | SSSH HHHH | HHHH HHHH |
| 1000 0000 | 0000 1010 |  |  |
| 128 | 10 |  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1024 | 512 | 256 | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

|  |
| --- |
| 29 Subnets |
| Network ID | Subnet/Host | Host |
| NNNN NNNN | NNNN NNNN | SSSS SHHH | HHHH HHHH |
| 1000 0000 | 0000 1010 |  |  |
| 128 | 10 |  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1024 | 512 | 256 | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

|  |
| --- |
| Subnet Mask |
| ID Network | Subnet/Host | Host |
| 1111 1111 | 1111 1111 | 1111 1000 | 0000 0000 |
| 255 | 255 | 248 | 0 |

|  |  |
| --- | --- |
| # Of Bits | Max # Of Subnets |
| 2 | 22 – 2 = 2 |
| 3 | 23 – 2 = 6 |
| 4 | 24 – 2 = 14 |
| 5 | 25 – 2 = 30 |
| 6 | 26 – 2 = 62 |
| 7 | 27 – 2 = 126 |
| 8 | 28 – 2 = 254 |
| 9 | 29 – 2 = 510 |
| 10 | 210 – 2 = 1022 |
| 11 | 211 – 2 = 2046 |
| 12 | 212 – 2 = 4094 |
| 13 | 213 – 2 = 8190 |

Working With Class A Address **9.0.0.0**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Max # Of Subnets | # Of Bits | Subnet # | Host # | Max # Of Hosts | 128.10.X.Y |
| 2000 |  | 1953 | 1119 |  |  |
| 2000 |  | 1949 | 704 |  |  |

|  |
| --- |
| 2000 Subnets |
| Network ID | Subnet | Subnet/Host | Host |
| NNNN NNNN | SSSS SSSS | SSSH HHHH | HHHH HHHH |
| 0000 1001 |  |  |  |
| 9 |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4096 | 2048 | 1024 | 512 | 256 | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

|  |
| --- |
| 2000 Subnets |
| Network ID | Subnet | Subnet/Host | Host |
| NNNN NNNN | SSSS SSSS | SSSH HHHH | HHHH HHHH |
| 0000 1001 |  |  |  |
| 9 |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4096 | 2048 | 1024 | 512 | 256 | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

|  |
| --- |
| Subnet Mask |
| Network ID | Subnet | Subnet/Host | Host |
| 1111 1111 | 1111 1111 | 1110 0000 | 0000 0000 |
| 255 | 255 | 224 | 0 |

|  |  |
| --- | --- |
| # Of Bits | Max # Of Subnets |
| 2 | 22 – 2 = 2 |
| 3 | 23 – 2 = 6 |
| 4 | 24 – 2 = 14 |
| 5 | 25 – 2 = 30 |
| 6 | 26 – 2 = 62 |
| 7 | 27 – 2 = 126 |
| 8 | 28 – 2 = 254 |
| 9 | 29 – 2 = 510 |
| 10 | 210 – 2 = 1022 |
| 11 | 211 – 2 = 2046 |
| 12 | 212 – 2 = 4094 |
| 13 | 213 – 2 = 8190 |