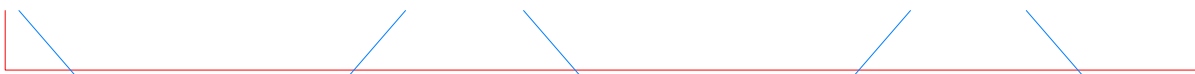


172 . 16 . 16 . 0 /20

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 1 1 1 1 1 1 . 1 1 1 1 1 1 1 1 . 1 1 1 1 0 0 0 0 . 0 0 0 0 0 0 0 0



255 20 (1's)

255

128
 64
 32
 + 16

 240

172 . 16 . 16 . 0 is the Network ID

172 . 16 . 16 . 255 is the Broadcast ID

$2^n - 2$ The number of usable host

$2^{12} - 2 = 4096 - 2 = 4094$

4096 The number of total host
 PER NETWORK

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