

SUBREDE

SUBNET

SA- 50

SB- 48

SC- 46

SD- 32

200.100.10.0

200.100.11.0

200.100.12.0

200.100.13.0

254

0 0 0 0 0 0 0

1 0 0 0 0 0 0 - 2

1 1 0 0 0 0 0 - 4

1 1 1 0 0 0 0 - 8

1 1 1 1 0 0 0 - 16

1 1 1 1 1 0 0 0 - 32

1 1 1 1 1 1 0 0 - 64

.

1 1 1 1 1 1 1 0 X

11 000000
SR Host

$$2^{N=1} = 2 = 4 \text{ SUBNETS}$$

$$2^{N=6} - 2 = 64 - 2 = 62 \text{ HOSTS}$$

200 . 100 . 10 .

255 . 255 . 255 . 192

11111111 . 11111111 . 11111111 . 10000000

4 SUBNETS

$2^N = 1$

128	64	32	16	8	4	2	1
128 + 64							
<hr/>							
192							

SA - 00
SB - 01
SC - 10
SD - 11

$$(256 \div 4) - 2$$

$$64 - 2$$

62 HOSTS

	SR	RED	1 st Host	Ultimo	B.D
		⊕	⊕	⊕	⊕
S ₁	00	0	1	62	63
S ₂	01	64	65	126	127
S ₃	10	128	129	190	191
S ₄	11	192	193	194	255

Handwritten binary representation of 127 and 191.

Top row (bits): 1 0 1 1 1 1 1 1

Second row (weights): 128 64 32 16 8 4 2 1

Left side (127):

$$\begin{array}{r} 128 \\ + 63 \\ \hline 191 \end{array}$$

Right side (191):

$$\begin{array}{r} 63 \\ + 128 \\ \hline 191 \end{array}$$

200.200.10.

255.255.255. 2 SUBNETS

Qtd SUBNETS = 2

Qtd HOSTS em CADA SUBNET

TABELA

200. 100. 10.

255. 255. 255. 1 128

$2^1 - 2_{\text{SUBNETS}}(0, 1)$

$(256 \div 2) - 2$
126
2
+10575

$2^2 - 2$
126
2
+10575

SR	<div> <div>Ⓟ</div> <div>0000000</div> </div> REDE	<div> <div>Ⓜ</div> <div>0000001</div> </div> IP Hosts	<div> <div>Ⓟ</div> <div>1111110</div> </div> Limbo	<div> <div>Ⓜ</div> <div>1111111</div> </div> BD
<u>0</u>	∅	1	126	127
1	128	129	254	255

0 1 1 1 1 1 1 1

128 64 32 16 8 4 2 1

127

1 0 0 0 0 0 0 0

200.100.10.10. 
MASC

SUBNETS

101 HOST em CADA SUBNET

TABELA

200.100.10.1

255.255.255.224

11100000

128 + 64 + 32

$(256 \div 8) - 2$

32 - 2

30 Hosts

$2^5 - 2$

$32 - 2$

30 Host's

SR	00000 R=12 ①	00001 10 ②	11110 2 ③	11111 30 ④
000	0	1	30	31
001	32	33	62	63
010	64	65	94	95
011	96	97	126	127
100	128	129	158	159
101	160	161	190	191
110	192	193	222	223
111	254	255	254	255

1 1 0 0 0 0 0 1

128 64 32 16 8 4 2 1

$128 + 64 + 1$

192

193

↓	↓	↓
0	0	0
0	0	1
0	1	0
0	1	1
1	0	0
1	0	1
1	1	0
1	1	1

.

[illegible]