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Preguntas

Problema 1

Dirección IP de host	192.168.200.139
Máscara de subred original	255.255.255.0
Máscara de subred nueva	255.255.255.224

Number of Subnet Bits	3
Number of Subnets Created	8
Number of Host Bits per Subnet	5
Number of Hosts per Subnet	30
Network Address of this Subnet	192.168.200.128
IPv4 Address of First Host on this Subnet	192.168.200.129
IPv4 Address of Last Host on this Subnet	192.168.200.158
IPv4 Broadcast Address on this Subnet	192.168.200.159

Problema 2

Host IP Address:	10.101.99.228
Original Subnet Mask	255.0.0.0
New Subnet Mask:	255.255.128.0

Number of Subnet Bits	9
Number of Subnets Created	512
Number of Host Bits per Subnet	15
Number of Hosts per Subnet	32,766
Network Address of this Subnet	10.101.0.0
IPv4 Address of First Host on this Subnet	10.101.0.1
IPv4 Address of Last Host on this Subnet	10.101.127.254
IPv4 Broadcast Address on this Subnet	10.101.127.255

Problema 3

Host IP Address	172.22.32.12
Original Subnet Mas	255.255.0.0
New Subnet Mask	255.255.224.0

Number of Subnet Bits	3
Number of Subnets Created	8
Number of Host Bits per Subnet	13
Number of Hosts per Subnet	8,190

Network Address of this Subnet	172.22.32.0
IPv4 Address of First Host on this Subnet	172.22.32.1
IPv4 Address of Last Host on this Subnet	172.22.63.254
IPv4 Broadcast Address on this Subnet	172.22.63.255

Problema 4

Host IP Address	192.1681.245
Original Subnet Mas	255.255.255.0
New Subnet Mask	255.255.255.252

Number of Subnet Bits	6
Number of Subnets Created	64
Number of Host Bits per Subnet	2
Number of Hosts per Subnet	2
Network Address of this Subnet	192.168.1.244
IPv4 Address of First Host on this Subnet	192.168.1.245
IPv4 Address of Last Host on this Subnet	192.168.1.246
IPv4 Broadcast Address on this Subnet	195.168.1.247

Problema 5

Host IP Address	128.107.0.55
Original Subnet Mas	255.255.0.0
New Subnet Mask	255.255.255.0

Number of Subnet Bits	8
Number of Subnets Created	256
Number of Host Bits per Subnet	8
Number of Hosts per Subnet	254
Network Address of this Subnet	128.107.0.0
IPv4 Address of First Host on this Subnet	128.107.0.1
IPv4 Address of Last Host on this Subnet	128.107.0.254
IPv4 Broadcast Address on this Subnet	128.107.0.255

Problema 6

Host IP Address	192.135.250.180
Original Subnet Mas	255.255.255.0
New Subnet Mask	255.255.255.248

Number of Subnet Bits	5
Number of Subnets Created	32
Number of Host Bits per Subnet	3

Number of Hosts per Subnet	6
Network Address of this Subnet	192.135.250.176
IPv4 Address of First Host on this Subnet	192.135.250.177
IPv4 Address of Last Host on this Subnet	192.135.250.182
IPv4 Broadcast Address on this Subnet	192.135.250.183

Why is the subnet mask so important when analyzing an IPv4 address?

Porque determina el numero de hosts posibles, pues indica el numero de bits que podemos usar.