TABLA DE DIRECCIONAMIENTO

Ricardo Benjamín Paz González KINAL 2017457

A. 10,000 hosts

| 255.255.0.0 = | 1111 | 111 | 1.11 | 111111. | 00000000. | 00000000 |
|----------------------|------|-----|------|---------|-----------|----------|
| | 1111 | 111 | 1 11 | 111111 | 11000000 | 00000000 |

2^14 = 16384 host en total

 $2^2 = 4$ host por subred

6 bits para host

2 bits para subred

 $2^2 = 4$ subredes

172.16.0.0

172.16.3.255

Primera Dirección Asignable: 172.16.0.1

255.255.192.0 (mascara de subred)

B. 351 hosts

 $2^9 = 512$ host en total

 $2^1 = 2$ host por subred

1 bit para host

7 bits para subred

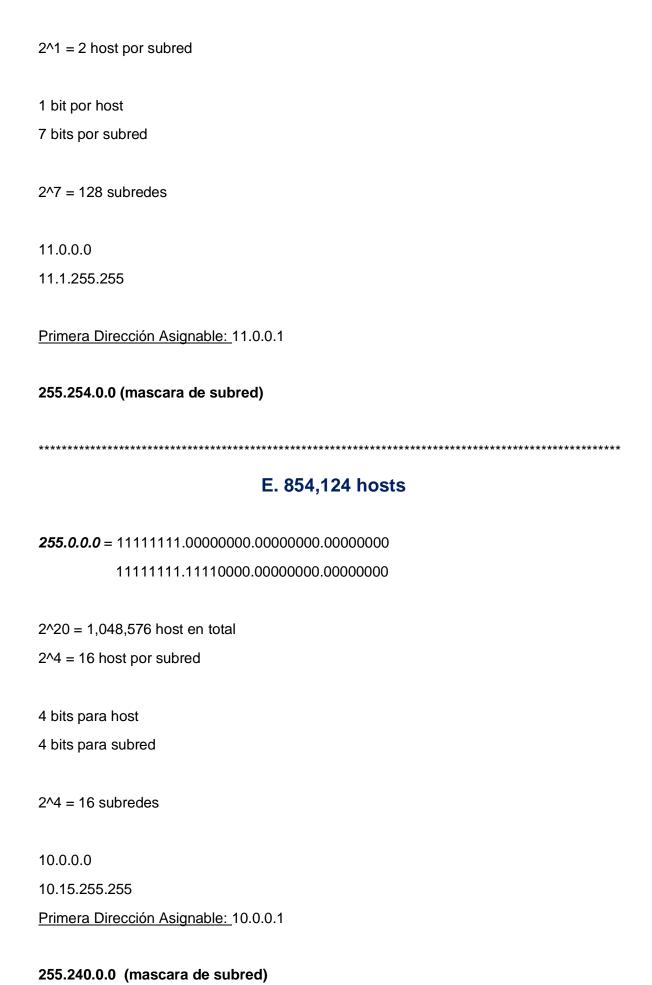
 $2^7 = 128$ subredes

| 172.20.0.0 |
|---|
| 172.20.1.255 |
| |
| Primera Dirección Asignable: 172.20.0.1 |
| |
| 255.255.254.0 (mascara de subred) |
| *************************************** |
| C. 512 hosts |
| |
| 255.255.0.0 = 111111111111111111110000000000000 |
| 11111111.111111111110.00000000 |
| |
| 2^9 = 512 host en total |
| 2 ¹ = 2 host por subred |
| |
| 1 bit para host |
| 7 bits para subred |
| |
| 2^7 = 128 subredes |
| |
| 172.17.0.0 |
| 172.17.1.255 |
| |

Primera Dirección Asignable: 172.17.0.1

255.255.254.0 (mascara de subred)

D. 124,000 host



| *************************************** |
|--|
| F. 2,000,000 hosts |
| 255.0.0.0 = 11111111.00000000.0000000000000000000 |
| 11111111.11100000.00000000.00000000 |
| 2^21 = 2,097,152 host en total |
| 2^5 = 32 host por subred |
| 5 bits para host |
| 3 bits para subred |
| 2^3 = 8 subredes |
| 12.0.0.0 |
| 12.31.255.255 |
| Primera Dirección Asignable: 12.0.0.1 |
| 255.224.0.0 (mascara de subred) |
| Serial Router 1 – Router 2 |
| 2.2.2.0/30 |
| |

R1: 2.2.2.2/30 R2:

2.2.2.1/30

Serial Router 1 – Router 3

2.2.2.4/30

R1: 2.2.2.6/30

R3: 2.2.2.5/30

Serial Router 2 – Router 3

2.2.2.8/30

R2: 2.2.2.10/30

R3: 2.2.2.9/30