Laboratorio 5

Integrantes

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Convierta de decimal a binario

224

123

64

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** | **Decimal** |
| 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 224 |
| 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 123 |
| 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 64 |

Convierta de binario a decimal

10111011

11000000

10101011

|  |  |  |  |  |  |  |  |  |
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| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |  |
| 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 187 |
| 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 192 |
| 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 171 |

Se tiene la siguiente dirección IP 192.168.20.60/30 . Cuál es la dirección de red y broadcast

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |
| 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| 0 | 0 | 32 | 16 | 8 | 4 | 0 | 0 |
| RED | 192 | 168 | 20 | 60 |  |  |  |
| FIM | 60 | + | 3 | = | 63 |  |  |
| BROAD |  |  |  |  |  |  |  |
| 192 | 168 | 20 | = | 63 |  |  |  |
|  |  |  |  |  |  |  |  |

Se tiene la siguiente dirección IP 192.168.100.50/27 . Cuál es la dirección de red y broadcast

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |
| 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 |
| 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
|  |  | 32 |  |  |  |  |  |

INICIO 32 32-1=31

RED 192.168.100.32 32+31=63

BROADCAST 192.168.100.63

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**¿Cuál es el formato comprimido de la dirección IPv6 fe80:0001:000b:0000:0220:0b2e:f0e0:0009?**

**Un administrador de red está agregando una nueva LAN a una sucursal. La nueva LAN debe admitir 30 dispositivos conectados. ¿Cuál es la máscara de red más pequeña que el administrador de red puede usar para la nueva red?**

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

145. Un administrador de red está agregando una nueva LAN a una sucursal. La nueva LAN debe admitir 25 dispositivos conectados. ¿Cuál es la máscara de red más pequeña que el administrador de red puede usar para la nueva red?

255.255.255.240

255.255.255.128

255.255.255.224

255.255.255.192

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

146. Un administrador de red está agregando una nueva LAN a una sucursal. La nueva LAN debe admitir 10 dispositivos conectados. ¿Cuál es la máscara de red más pequeña que el administrador de red puede usar para la nueva red?

255.255.255.240

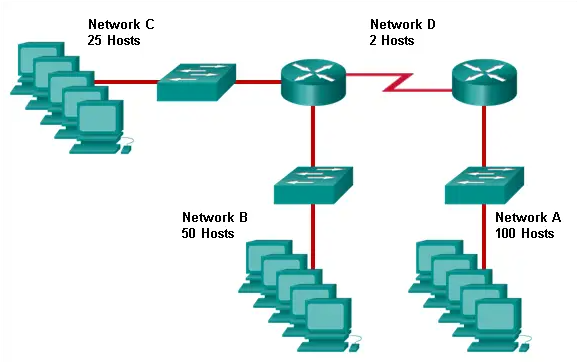
255.255.255.128

255.255.255.224

255.255.255.192

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

**154. Consulte la ilustración. Coloque la dirección de red, broadcast**



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| **128** | **64** | | **32** | **16** | | **8** | **4** | **2** | **1** | |
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|  |  | |  |  | |  |  |  |  | |
| host | | Red | | |  | | |  | | Broadcast | |  |
| 100 | | 192.168.0.0 | | |  | | |  | |  | |  |
| 50 | |  | | |  | | |  | |  | |  |
| 25 | |  | | |  | | |  | |  | |  |
| 2 | |  | | |  | | |  | |  | |  |