Ejercicios de direccionamiento IP

1.- Transforma los siguientes números a binario

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Nro | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
| 128 |  |  |  |  |  |  |  |  |
| 64 |  |  |  |  |  |  |  |  |
| 32 |  |  |  |  |  |  |  |  |
| 127 |  |  |  |  |  |  |  |  |
| 63 |  |  |  |  |  |  |  |  |
| 31 |  |  |  |  |  |  |  |  |
| 15 |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |
| 255 |  |  |  |  |  |  |  |  |
| 192 |  |  |  |  |  |  |  |  |
| 224 |  |  |  |  |  |  |  |  |
| 240 |  |  |  |  |  |  |  |  |
| 248 |  |  |  |  |  |  |  |  |
| 252 |  |  |  |  |  |  |  |  |

2.- indica cual es la mascara en decimal

|  |  |
| --- | --- |
| mascara | decimal |
| /8 |  |
| /16 |  |
| /24 |  |
| /10 |  |
| /12 |  |
| /26 |  |
| /30 |  |
| /14 |  |
| /26 |  |
| /21 |  |
| /25 |  |
| /28 |  |
| /9 |  |
| /29 |  |

3.- indica cual es la mascara en /

|  |  |
| --- | --- |
| mascara | / |
| 255.0.0.0 |  |
| 255.192.0 |  |
| 255.255.254.0 |  |
| 255.255.224.0 |  |
| 255.255.255.252 |  |
| 255.255.128.0 |  |
| 255.248.0.0 |  |
| 255.255.255.128 |  |

4.- indica si la dirección IPs es válida para ser utilizada en un host

|  |  |  |
| --- | --- | --- |
| Nro | si | no |
| 10.10.10.1/24 |  |  |
| 192.168.20.63/26 |  |  |
| 192.168.20.95/27 |  |  |
| 192.168.20.96/28 |  |  |
| 192.168.20.112/30 |  |  |
| 172.16.0.129/27 |  |  |
| 172.16.0.177/30 |  |  |
| 172.16.0.179/30 |  |  |
| 172.16.0.163/28 |  |  |