

(128) (64) 32 16 8 4 2 1

- ✓ 58 host
- ✓ 29 host
- ✓ 15 host
- 7 host
- 2 host

(IP)

192.168.72.0

(58) → $2^6 = 64$ host

IP Range

192.168.72.0 → 192.168.72.63

Network ip: 192.168.72.0

Broadcast ip: 192.168.72.63

Subnetmask
255.255.255.192

Gateway: 192.168.72.1
IP: 192.168.72.2

Usable ip → 192.168.72.1 → 192.168.72.62

29 host

$2^5 = 32$ host

IP Range:

192.168.72.64 → 192.168.72.95

Network ip: 192.168.72.64

Broadcast ip: 192.168.72.95

Subnetmask
255.255.255.224

Usable ip → 192.168.72.65 to 192.168.72.94

IP:

Gateway: 192.168.72.65
IP: 192.168.72.66

15 host

$2^4 = 16$ hosts

IP range:

192.168.72.65 → 192.168.72.80

$2^5 = 32$ hosts

IP range:

192.168.72.96 → 192.168.72.127

Network ip: 192.168.72.96

Broadcast ip: 192.168.72.127

Usable ip: 192.168.72.97 to 192.168.72.126

Gateway: 192.168.72.97

IP: 192.168.72.98

Subnetmask: 255.255.255.224

7 host

$2^4 = 16$ hosts

IP range:

192.168.72.128 → 192.168.72.143

Network ip: 192.168.72.128

Broadcast ip: 192.168.72.143

Usable ip: 192.168.72.129 to 192.168.72.142

Gateway: 192.168.72.129

IP: 192.168.72.130

Subnet: 255.255.255.240

2 host

$$2^2 = 4 \text{ hosts}$$

IP range:

192.168.72.144 → 192.168.72.147

Network ip: 192.168.72.144

Broadcast ip: 192.168.72.147

Usable ip

192.168.72.145 to 192.168.72.146

Gateway ip: 192.168.72.145

192.168.72.146

Subnetmask: 255.255.255.252

7 host

PC

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PC

16 host

16 hosts