1. **Cross over cable**

**Ujung 1 Standard (568B)**

Pin 1 Putih-Orange

Pin 2 Orange

Pin 3 Putih-Hijau

Pin 4 Biru

Pin 5 Biru-putih

Pin 6 Hijau

Pin 7 Putih-Cokelat

Pin 8 Cokelat

**Ujung 2 Cross(568A)**

Pin 1 Putih – Hijau

Pin 2 Hijau

Pin 3 Putih – Orange

Pin 4 Biru

Pin 5 Biru – Putih

Pin 6 Orange

Pin 7 Putih – Cokelat

Pin 8 Cokelat

1. **network address 192.168.10.0/24**
   * **Accountant – 61 computers**
   * **Sales – 32 computers**
   * **Manager – 10 computers**

Kelas C

Subnet mask 255.255.255.0

Network address 192.168.10.0

Broadcast address 192.168.10.255

* Cari subnet mask baru

H = 2^ - 2 >= 61

H= 2^6 -2 >=61

H= 62 >= 61

rumus N

n = 32 - b - h

n = 32 – 24 – 6

n = 2

11111111. 11111111. 11111111. 11000000

255.255.255.192

* Tentukan jumlah hosts

Host = 2^6 = 64

|  |  |  |  |
| --- | --- | --- | --- |
| Network address | Broadcast address | Usable IP | Getway |
| 192.168.10.0 | 192.168.10.63 | 192.168.10.1 - 192.168.10.62 | 192.168.10.1 |
| 192.168.10.64 | 192.168.10.127 | 192.168.10.65 – 192.168.10.126 | 192.168.10.65 |
| 192.168.10.128 | 192.168.10.191 | 192.168.10.129 - 192.168.10.190 | 192.168.10.129 |
| 192.168.10.192 | 192.168.10.255 | 192.168.10.193 - 192.168.10.254 | 192.168.10.193 |
|  |  |  |  |

1. **Network address 120.45.0.0/24**
   * **Sales – 100 computers**
   * **Accountant – 37 computers**
   * **HR – 25 computers**
   * **Manager – 8 computers**

**Subnet 255.255.0.0**

* Sales 126 IPs

2^h – 2 >= 100

2^7 – 2 >=>100

128

R = s + (32 -b-host)

R= 16+ (32-16 – 7)

R= 25

NA : 120.45.0.33

BA : 120.45.0.127

Usable IP : 120.45.0.84 – 120.45.0.126

Gateway : 120.45.0.84

* Accountant 62IPs

2^h -2 >= 37

2^6 -2 >= 37

64

R= 16 + (32-16 – 6)

R = 26

NA : 120.45.0.128

BA : 120.45.0.191

Usable IP : 120.45.0.129 - 120.45.0.190

Gateway : 120.45.0.129

* HR 62IPs

2^h -2 >= 25

2^6-2 >=25

64

R= 16 + (32-16 – 6)

R = 26

NA : 120.45.0.192

BA :. 120.45.0.255

Usable IP : 120.45.0.191-120.45.0.254

Gateway : 1120.45.0.191

* Manager 14IPs

2^h -2 >=8

2^4 -2 >= 8

16

R = 16+(32-16-4)

R=28

NA : 120.45.1.0

BA : 120.45.1.15

Usable IP : 120.45.1.1 - 120.45.1.14

Gateway : 120.45.1.1