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# COMPUTER SYSTEMS
# UD6: NETWORKS INTRODUCTION
# A02: NETWORK IP ADDRESSING

CFGS DAW
DPT INF

1. Find out the network address of the following IP addresses

| | |
|---|---|
| 188.10.18.2/16 | |
| 10.10.48.80/24 | |
| 192.149.24.191/24 | |
| 150.203.23.19/16 | |

2. What class of network do the following IP addresses correspond to?

| | |
|---|---|
| 10.250.1.1 | |
| 150.10.15.0 | |
| 192.14.2.0 | |
| 148.17.9.1 | |
| 193.42.1.1 | |
| 126.8.156.0 | |
| 220.200.23.1 | |
| 230.230.45.58 | |

3. Fill in the missing data in the following table.

| IP address | Network address/ Network mask | Broadcast address | Gateway address | IP address range |
|---|---|---|---|---|
| 192.168.240.120 | | 192.168.240.255 | | |
| 172.6.12.34 | | | 172.16.0.1 | |
| 10.1.1.1 | | | | 10.0.0.2/10.255.255.254 |

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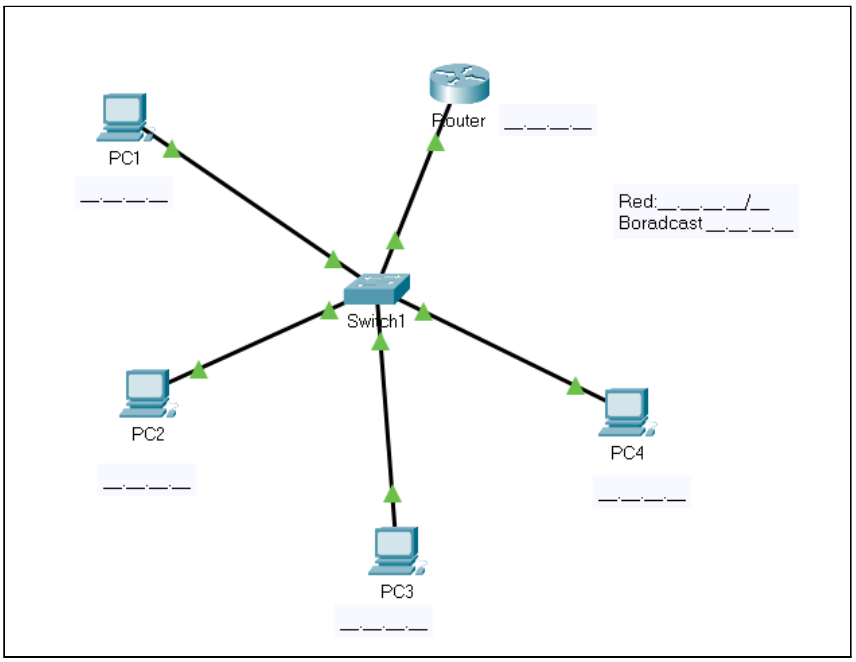
4. Let's imagine that we must configure a network with 50 computers using private IPs:
What kind of IP address do I need? - Choose a network address among the possible ones.

What range of IP addresses will we use?
What netmask does that IP address have?
What range of IP addresses can I assign to hosts?
What IP will I assign to the gateway?
Fill in the values in the following image selecting for the 4 PCs some of the possible addresses available.




5. Subnetting. Suppose we need to configure IP addressing
A company has a class C network and needs to create 2 subnets with the capacity to connect at least 40 computers in each of them. Write the network identifier and the subnet identifier knowing that IPv4 addresses are used.