GENERALITAT VALENCIANA
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L'FSE inverteix en el teu futur
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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	188.10.00
10.10.48.80/24	10.10.48.0
192.149.24.191/24	192.149.24.0
150.203.23.19/16	150.203.0.0

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

10.250.1.1	A (red privada)
150.10.15.0	B
192.14.2.0	C
148.17.9.1	B
193.42.1.1	C
126.8.156.0	A
220.200.23.1	C
230.230.45.58	D

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	255.255.255.0 /24	192.168.240.255	192.168.240.1	192.168.240.2-192.168.240.254
172.6.12.34	255.255.0.0 /16	172.6.255.255	172.6.0.1	172.6.0.2-172.6.255.254
10.1.1.1	255.0.0.0 /8	10.255.255.255	10.0.0.1	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.**

Tipo C

RED: 192.168.1.0/24

What range of IP addresses will we use?

192.168.1.0 – 192.168.1.255

What netmask does that IP address have?

255.255.255.0 /24

What range of IP addresses can I assign to hosts?

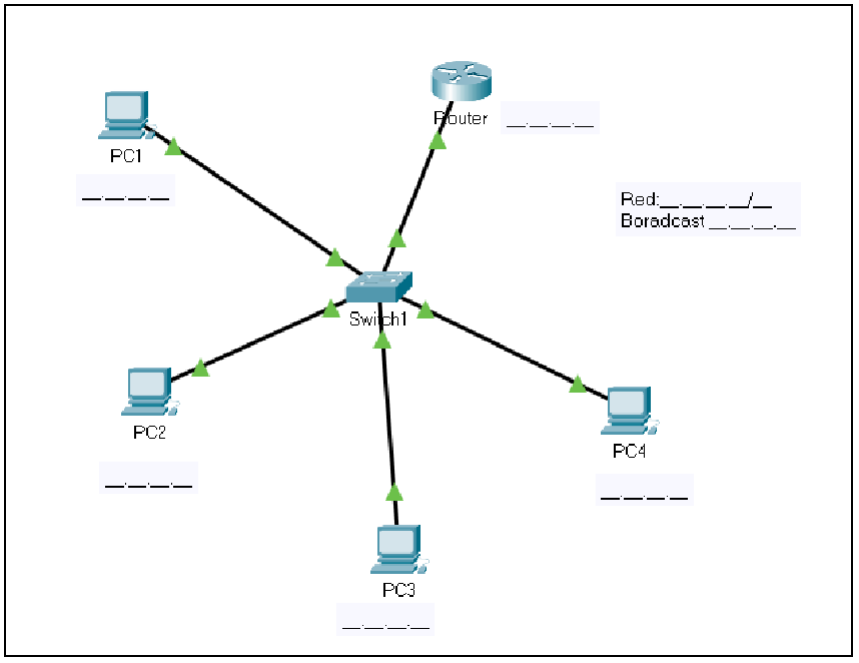
192.168.1.0 – 192.168.1.255

What IP will I assign to the gateway?

192.168.1.1

Fill in the values in the following image selecting for the 4 PCs some of the possible addresses available.

192.168.1.10, 192.168.1.17, 192.168.1.14, 192.168.1.15



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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.