1. What is the last valid host address for the subnet: 182.21.142.0 255.255.254.0 (1p)?

2. Which subnets does the address belong to 192.168.81.159.255.255.255.128 (1p)?

3. What is the network broadcast address 164.23.235.128/26 (1p)?

4. Design a subnet mask for the 185.21.0.0/16 network. You want 1600 subnets with up to 20 host address per subnet. What subnet mask should you use (1p)?

5. Starting from the IPv4 address 10.15.236.190 255.255.248.0 identify the netmask that satisfy the following requirements (2p):

-minimum 13 subnets;

-minimum 26 address/subnet.

6. Starting at address 172.19.100.24 with netmask 255.255.240.0, using dynamic subnetting, get the following subnets:

- a subnet with 500 address;

- a subnet with 127 address;

- a subnet with 64 address;

And specify:

a)10th host address and broadcast address for the first subnet mentioned above (1p);

b)the gateway address and the last host address for the second subnet (1p);

c)the range of host addresses and the number of host address for the last subnetted subnet (1p);