

Part A

Having the following IPs, specify the: network address, broadcast address, the range of available hosts and the mask in dotted decimal format:

1.130.197.216.35/21

a.Network address: 130.197.209.0

b.Broadcast address: 130.197.248.255

c.Range of available hosts: FROM 130.197.209.1 TO 130.197.248.254

d.Mask: 255.255.248.0

2. 25.119.149.79/29

a.Network address: 25.119.149.72

b.Broadcast address: 25.119.149.79

c.Range of available hosts: FROM 25.119.149.73 TO 25.119.149.78

d.Mask: 255.255.255.248

3.194.8.118.25/25

a.Network address: 194.8.118.0

b.Broadcast address: 194.8.118.127

c.Range of available hosts: FROM 194.8.118.1 TO 194.8.118.126

d.Mask: 255.255.255.128

Part B

Having the IP 194.8.118.25/25, divide it into 4 subnetworks with the **maximum** number of hosts possible for each one. Specify for each subnetwork:

1.Subnet 1

a.Network address: 194.8.118.0

b.Broadcast address: 194.8.118.31

c.Range of available hosts: FROM 194.8.118.1 TO 194.8.118.30

d.Mask: 255.255.255.224 OR /27

2.Subnet 2

a.Network address: 194.8.118.32

b.Broadcast address: 194.8.118.63

c.Range of available hosts: FROM 194.8.118.33 TO 194.8.118.62

d.Mask: 255.255.255.224 OR /27

3.Subnet 3

a.Network address: 194.8.118.64

b.Broadcast address: 194.8.118.95

c.Range of available hosts: FROM 194.8.118.65 TO 194.8.118.94

d.Mask: 255.255.255.224 OR /27

4.Subnet 4

a.Network address: 194.8.118.96

b.Broadcast address: 194.8.118.127

c.Range of available hosts: FROM 194.8.118.97 TO 194.8.118.126

d.Mask: 255.255.255.224 OR /27