

1. Simplify the IPv6 address:

2001:0718:0002:0001:1000:92e0:814a:8336

2001:0718:2:1:1000:92e0:814a:8336

2001:0018:0000:10a0:0000:0000:215a:3548

2001:18:0:10a0::215a:3548

2001:0000:0000:0000:92e0:0000:0000:0bcd

2001::92e0:0:0:bcd

2002:0124:0015:0001:abd5:5510:0000:abba

2002:124:15:1:abd5:5510:0:abba

2. Create EUI-64 from the following MAC addresses:

50:E5:49:E1:38:F8

52:E5:49:FF:FE:E1:38:F8

00:0C:29:DA:A4:D5

02:0C:29:FF:FE:DA:A4:D5

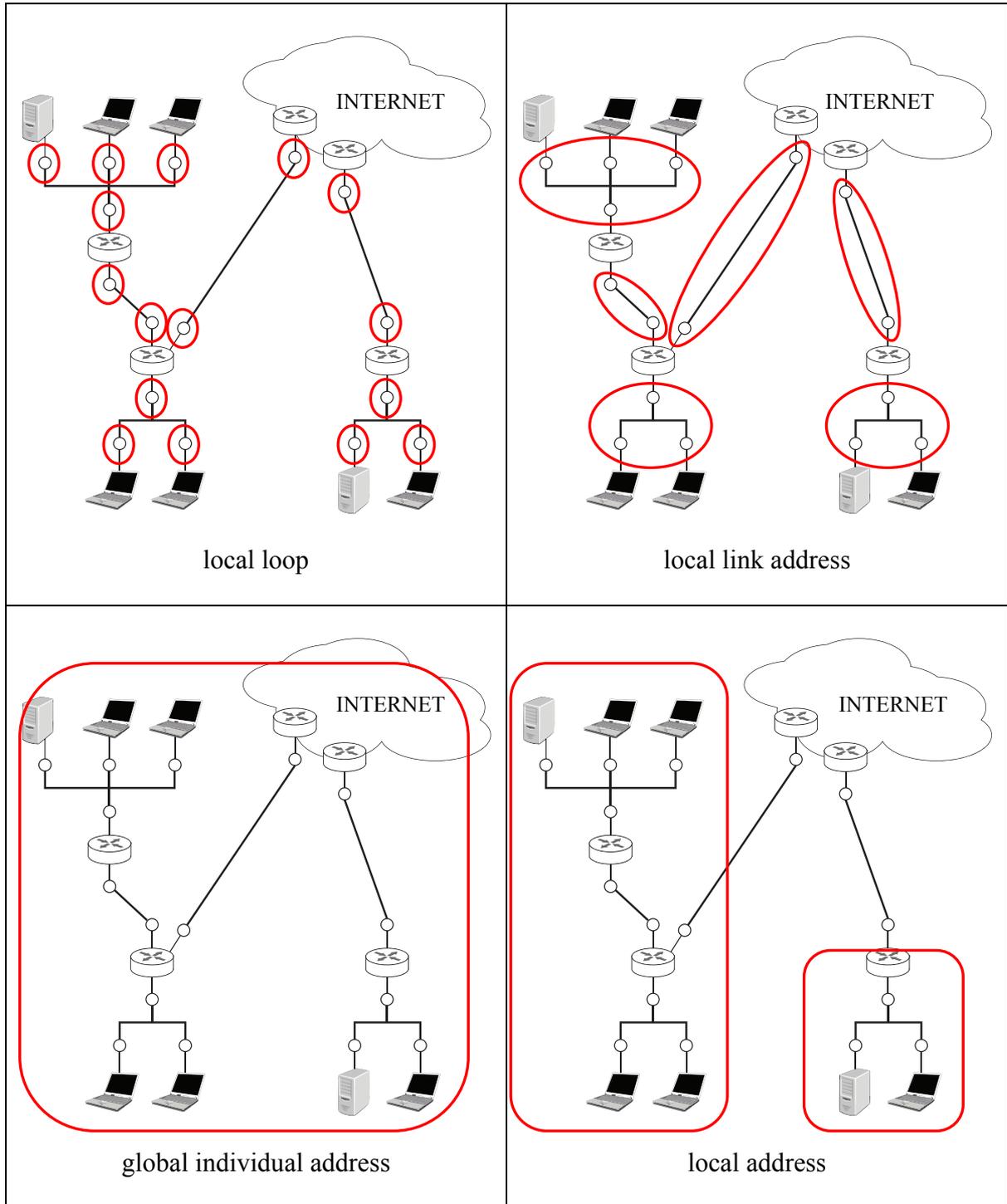
00:0A:AB:54:59:53

02:0A:AB:FF:FE:54:59:53

30:d7:aa:bb:cc:dd

32:d7:aa:ff:fe:bb:cc:dd

3. Mark the network area corresponding to the description.



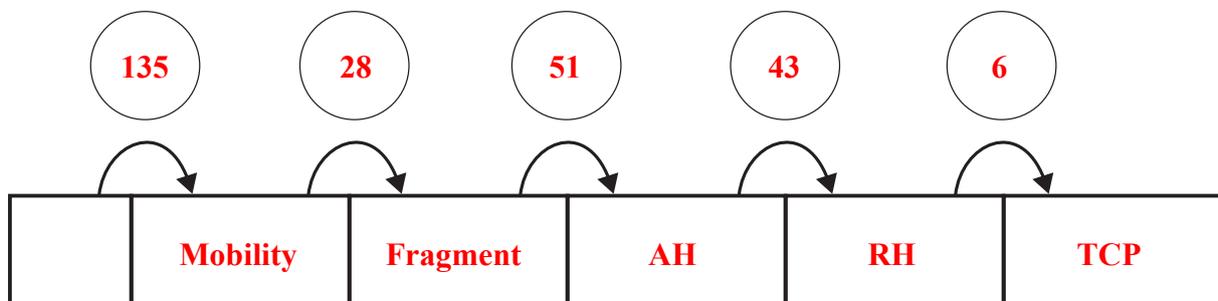
○ – symbol of an interface

4. Sort the IP datagram properties in the list below.

IPv4	IPv6
1	2
3	4
5	6
7	8

- 1 – Address length is 32 bits
- 2 – Address length is 128 bits
- 3 – Header contains checksum
- 4 – Header does not contain checksum
- 5 – Optional header items are contained in standard packet header
- 6 – Optional header items are contained in extended packet header
- 7 – Header contains bit alignment
- 8 – By default handles quality of service (QoS)

5. Fill in correct sequence and header names in an IPv6 datagram.



(BASE)
IPv6 Header

If you need to transmit the header:

header	type
Mobility	135
Fragment	28
TCP	6
Authentication (AH)	51
Routing (RH)	43

6. Fill in which address may be listed in an IPv6 datagram as a source address.

a) Computer has a single network interface that has been assigned the following addresses:

1	local link	fe80::20c:29ff:feda:a4d5/64
2	global individual	2001:158:12:6658:adb4:a54d:faaa:1983
3	global individual	2001::adb4:a54d:faaa:1983

Address 2 will be listed in IPv6 datagram as a source address.

b) Computer has a single network interface that has been assigned the following addresses:

1	local link	fe80::20c:29ff:fedb:a4df/64
2	global individual	2001:d844:1:1:abba:acdc:a:54
3	global individual	2001::abba:acdc:a:54

Address 2 will be listed in IPv6 datagram as a source address.