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 |

1. 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 |

1. Mark the network area corresponding to the description.

|  |  |
| --- | --- |
| zony.eps  INTERNET  INTERNET  local loop | zony.eps  local link address |
| zony.eps  INTERNET  INTERNET  global individual address | zony.eps  local address |

 – symbol of an interface

1. 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)

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

ipv6_headers.eps

**AH**

**Mobility**

**Fragment**

**TCP**

**RH**

**6**

**43**

**51**

**28**

**135**

(BASE)

IPv6 Header

If you need to transmit the header:

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

1. 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.