**Worksheet 18(b) - IP Addressing - Classless**

1. For the following CIDR addresses, give the network part of the address in binary:

|  |  |
| --- | --- |
| **Network/Mask length** | **Network part in binary** |
| C4.50.0.0/12 |  |
| C4.5E.10.0/20 |  |
| C4.60.0.0/12 |  |
| C4.68.0.0/14 |  |
| 80.0.0.0/1 |  |
| 40.0.0.0/2 |  |
| 00.0.0.0/2 |  |

1. Consider, the following routing table using CIDR:

|  |  |
| --- | --- |
| **Network/Masklength** | **Nexthop** |
| C4.50.0.0/12 | A |
| C4.5E.10.0/20 | B |
| C4.60.0.0/12 | C |
| C4.68.0.0/14 | D |
| 80.0.0.0/1 | E |
| 40.0.0.0/2 | F |
| 00.0.0.0/2 | G |

What is the next hop for packets that arrive with the following destinations:

1. C4.5E.13.87
2. C4.5E.22.09
3. C3.41.80.02
4. 5E.43.91.12
5. C4.6D.31.2E
6. C4.6B.31.2E