

Q11

## Q11

- Recall IP addresses are 32 bit addresses with a subnet part and host part
- Classless Interdomain Routing (CIDR) Notation
- Consider the subnet: 50.150.250.0/24
  - Explain what /24 means
  - How many IP addresses in this subnet?
  - How many hosts are in this subnet?

- (1) 24 bits to identify the subnet
- (2)  $2^8$ , because there are 32-24 bits in the host part.
- (3)  $2^8-2$ , because all zeros and all ones in the host part are reserved addresses.

Q12

5 subnets are in the network

Q13

- (1) 206.68.144.0 is the first address, 206.68.144.1 is the first assignable address.
- (2) 206.68.151.255
- (3) 255.255.248.0

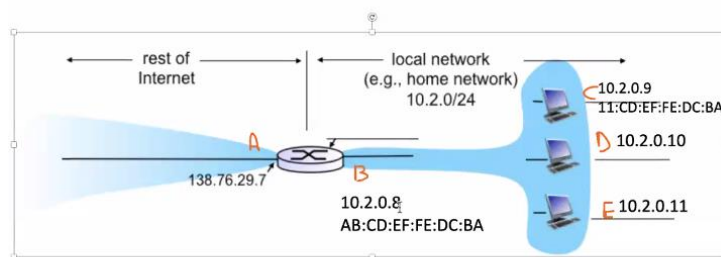
Q14

22 bits are same, so the CIDR aggregation is : 137.132.24.0/22

Q15

## Q15

- Consider the network below. Specify IP addresses for all interfaces of the local network. Also assign MAC addresses to these interfaces.



Q16

| WAN side address/port   | LAN side address/port |
|-------------------------|-----------------------|
| 138.76.29.7, port 80900 | 10.2.0.9, port 7000   |
| 138.76.29.7, port 80999 | 10.2.0.10, port 7000  |
| 138.76.29.7, port 80998 | 10.2.0.11, port 7000  |
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