

Exercise Questions

CS447-003 Networks and Data Communications

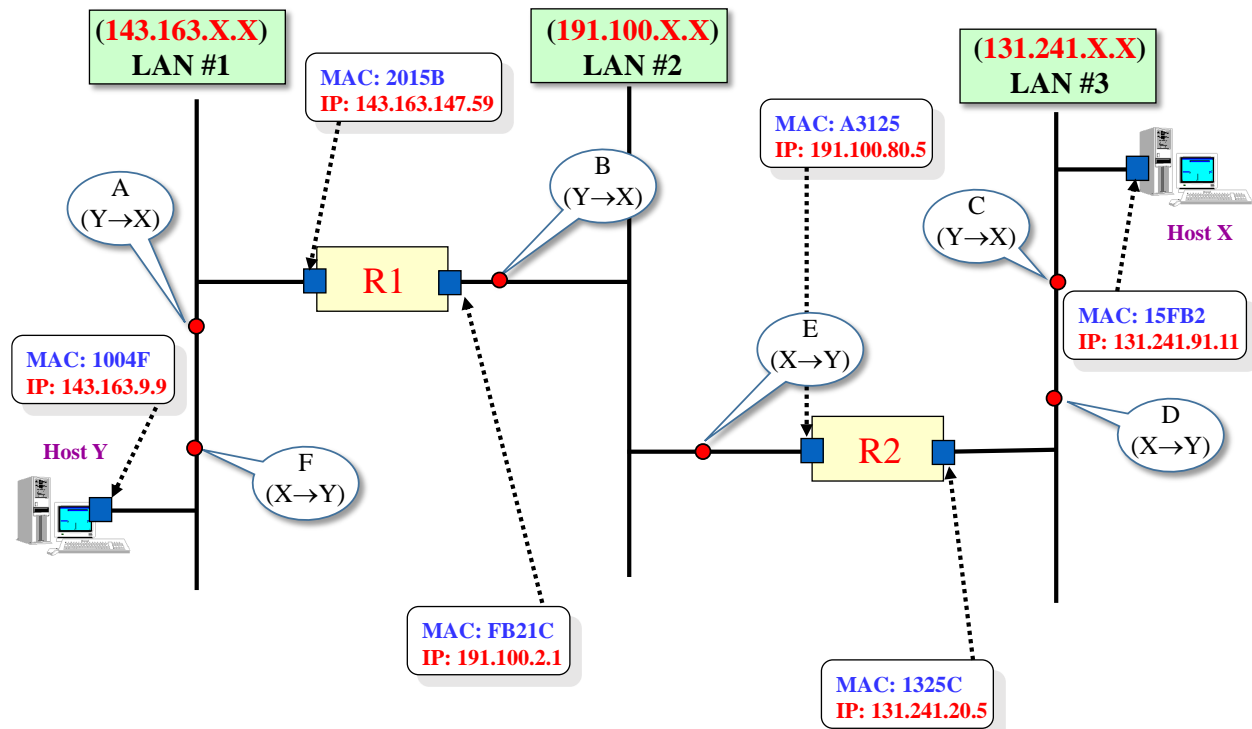
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QUESTION #1:

If a domain has 15,000 host computers (i.e., needs 15,000 IP addresses) and if the domain is supposed to have 18 subnets, what is its subnet mask (answer in the standard “x.x.x.x” format, where ‘x’ is a decimal number between 0 and 255)?

Assume that the 15,000 hosts are evenly distributed to the 18 subnets.

QUESTION #2:



In the figure above, show:

- (i) The source (sender) IP address
- (ii) The destination (receiver) IP address
- (iii) The source (sender) MAC address
- (iv) The destination (receiver) MAC address

At point A, B, C, D, E, and F (the direction of network traffic is shown in the figure)