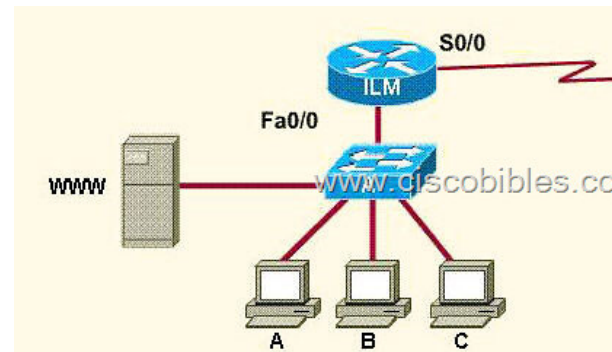


CCNA ICND1 Bible - ARP Testlet

This is a testlet. The testlet consists of 4 questions that relate to the scenario below:



Directions: Refer to the exhibit. This testlet consists of four questions that address steps in the process of data communication between host F and the server named WWW" on another LAN. You are free to move back and forth between the questions to review your answers. Question 1: In order to begin communicating with the server, host F sends out an ARP request. How will the devices exhibited in the topology respond to this request? A - Switch West _1 will reply with the MAC address of the server. B - Hosts D and E will respond that the destination is not on the local LAN. C - Router SFX will forward the ARP request to the ILM router. D - Switch West _1 will block the request since the server is not on the LAN. E - The ILM router will respond with the IP address of the WWW server. F - Router SFX will respond with the MAC address of its Fa0/0 interface. **Answer: F**

Explanation: Because the server WWW is on another LAN of host F, host F knows that it has to send its packets to the default gateway. Therefore, for the first time, it will send out an ARP broadcast message asking for the MAC address of router SFX. Router SFX receives this message and replies with the MAC address of Fa0/0 interface. Later, when host F wants to send packets to WWW server, it will include the IP address of WWW server and the MAC address of Fa0/0 interface of SFX router in the "destination IP address" and "destination MAC address" fields, respectively. Question 2: The ARP reply has been received by host F, which needs to build the packet. What information will be placed in the header of the packet that leaves host F if host F is to communicate with the WWW server? (Choose two) A - The destination address will be the IP address of interface Fa0/0 of the ILM router. B - The destination address will be the IP address of the WWW server. C - The destination address will be the IP address of interface Fa0/0 of router SFX. D - The source address will be the IP address of host F. E - The source address will be the IP address of interface Fa0/0 of router SFX. F - The destination address will be the IP address of interface Fa0/0 of router SFX. **Answer: B D**

Explanation: After receiving ARP reply from SFX router, host F will place these fields in the header of the packets: **Source addresses:** the IP address of host F and the MAC address of host F **Destination addresses:** the IP address of WWW server and the MAC address of SFX server **Question 3:** The frame has been received by the ILM router and is to be delivered on the local LAN. Which two statements describe the addressing of the Ethernet frame that has been created by the ILM router? (Choose two) A - The destination address will be the MAC address of the switch A port attached to the Fa0/0 interface of the ILM router. B - The destination address will be the MAC address of the WWW server. C - The destination address will be the MAC address of the A switch port attached to the WWW server. D - The source address will be the MAC address of host F. E - The source address will be the MAC address of interface Fa0/0 of the ILM router. **Answer: B E**

Question 4: Host F is displaying two World Wide Web documents from the WWW server in two browser windows at the same time. How did the data find its way to the correct browser windows? A - The IP source addresses of the packets will be used to direct the data to the correct browser window. B - The browsers track the data by the URL. C - TCP port numbers are used to direct the data to the correct application window. D - The OSI application layer tracks the conversations and directs them to the correct browser. **Answer: C**

Explanation: TCP and UDP protocol port numbers are designed to distinguish multiple applications running on a single device from one another. In the TCP and UDP header, there are "Source Port" and "Destination Port" fields which are used to indicate the message sending process and receiving process identities defined. The combination of the IP address and the port number is called "socket".