

Check Test12 The ARP Process Quiz

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1. What is one function of the ARP protocol? *

1 point

- ☐ obtaining an IPv4 address automatically
- ☐ mapping a domain name to its IP address
- ☒ resolving an IPv4 address to a MAC address
- ☐ maintaining a table of domain names with their resolved IP addresses

2. Which destination address is used in an ARP request frame? *

1 point

- ☐ 0.0.0.0
- ☐ 255.255.255.255
- ☒ FFFF.FFFF.FFFF
- ☐ 127.0.0.1
- ☐ 01-00-5E-00-AA-23

3. Which statement describes the treatment of ARP requests on the local link? *

1 point

- ☐ They must be forwarded by all routers on the local network.
- ☒ They are received and processed by every device on the local network.
- ☐ They are dropped by all switches on the local network.
- ☐ They are received and processed only by the target device.

4. What important information is examined in the Ethernet frame header by a Layer 2 device in order to forward the data onward? *

1 point

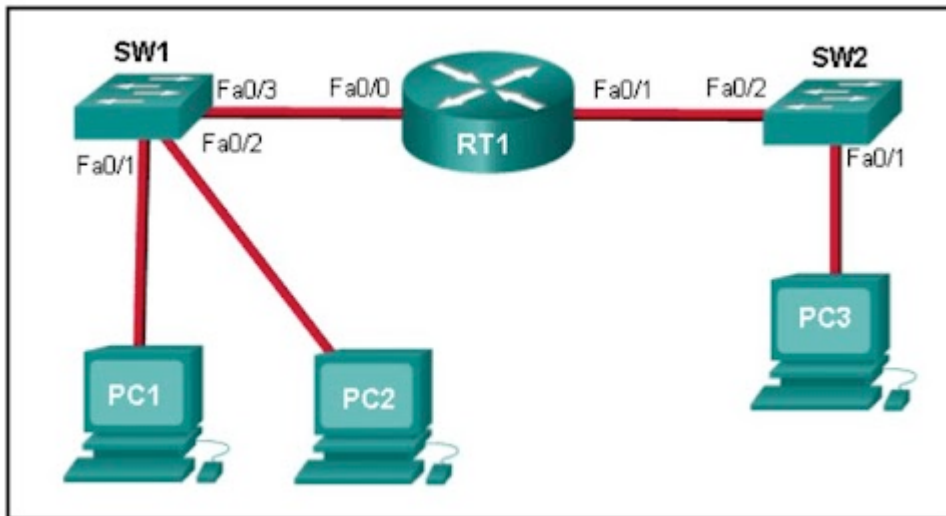
- ☐ source MAC address
- ☐ source IP address
- ☒ destination MAC address
- ☐ Ethernet type
- ☐ destination IP address

5. What are two functions of MAC addresses in a LAN? (Choose two.) *

1 point

- ☒ to allow the transfer of frames from source to destination
- ☐ to determine which host has priority to transfer data
- ☐ to indicate the best path between separate networks
- ☐ to associate with a specific network IP address
- ☒ to uniquely identify a node on a network

6. Refer to the exhibit. PC1 issues an ARP request because it needs to send a packet to PC2. In this scenario, what will happen next? * 1 point



- ☒ PC2 will send an ARP reply with the PC2 MAC address.
- ☐ RT1 will send an ARP reply with the RT1 Fa0/0 MAC address.
- ☐ RT1 will send an ARP reply with the PC2 MAC address.
- ☐ SW1 will send an ARP reply with the PC2 MAC address.
- ☐ SW1 will send an ARP reply with the SW1 Fa0/1 MAC address.

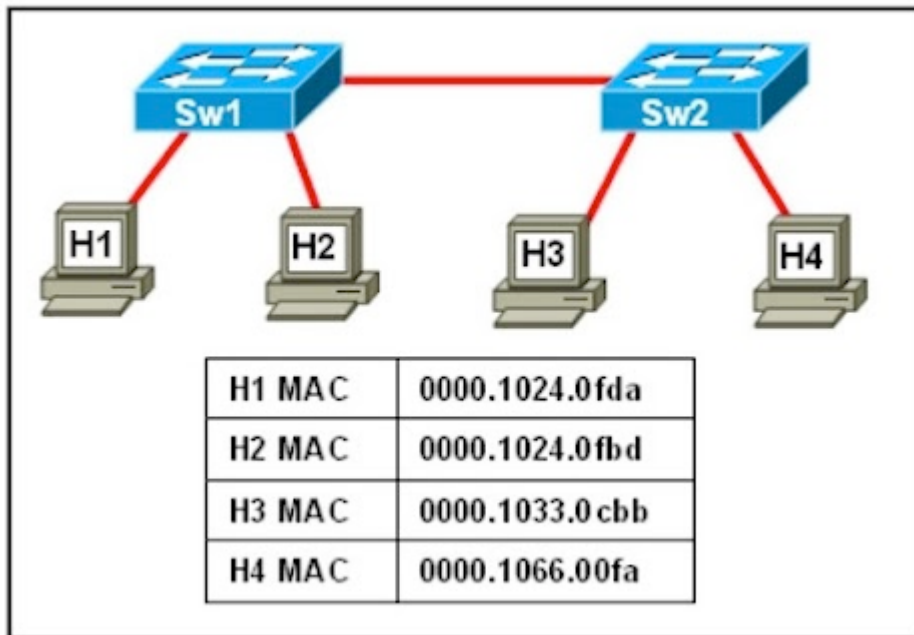
7. What addresses are mapped by ARP? *

1 point

- ☒ IPv4 address to a destination MAC address
- ☐ destination IPv4 address to the source MAC address
- ☐ destination IPv4 address to the destination host name
- ☐ destination MAC address to the source IPv4 address

8. Refer to the exhibit. Switches Sw1 and Sw2 have MAC address tables that are populated with all the exhibited host MAC addresses. If host H1 sends a frame with destination address FFFF.FFFF.FFFF, what will be the result?

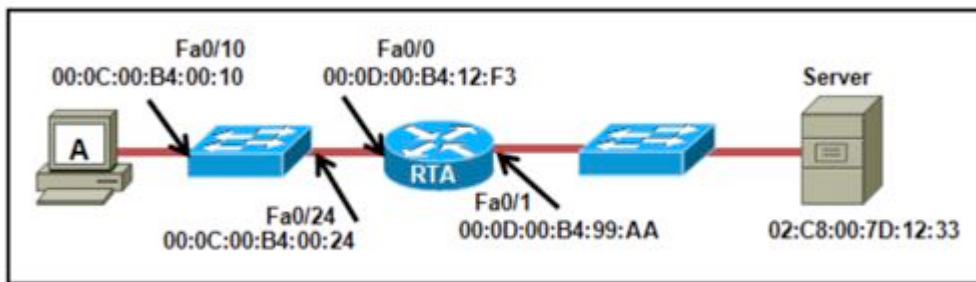
* 1 point



- ☐ Sw1 will discard the frame.
- ☐ Sw1 will flood the frame out all ports except the inbound port. The frame will be discarded by Sw2 but processed by host H2.
- ☐ Sw1 will flood the frame out all ports except the inbound port. The frame will be flooded by Sw2 but discarded by hosts H2, H3, and H4.
- ☒ Sw1 will flood the frame out all ports except the inbound port. The frame will be flooded by Sw2 and processed by hosts H2, H3, and H4.

9. Refer to the exhibit. Host A needs to send data to the server, but does not know its MAC address. When host A sends out an ARP request, what response will be in the ARP reply?

1 point



- ☐ 00:0C:00:B4:00:10
- ☐ 00:0C:00:B4:00:24
- ☒ 00:0D:00:B4:12:F3
- ☐ 00:0D:00:B4:99:AA
- ☐ 02:C8:00:7D:12:33

10. What statement describes a characteristic of MAC addresses? *

1 point

- ☒ They are the physical address of the NIC or interface.
- ☐ They are only routable within the private network.
- ☐ They are added as part of a Layer 3 PDU.
- ☐ They have a 32-bit binary value.

11. Which two characteristics describe MAC addresses? (Choose two.) *

1 point

- ☒ physical address assigned to the NIC
- ☒ identifies source and destination in Layer 2 header
- ☐ logical address assigned by DHCP
- ☐ used by routers to select the best path to a destination

Your understanding of today's class *

1 2 3 4 5

I didn't understand the class at all

☐☐☐☐☒

I understand the class very well

What you did not understand in today's class? (Option)

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