

Consider a pool of public addresses 200.100.4.64/26.

Answer True or False to the following sentences:

This pool has terminals between 200.100.4.65 and 200.100.4.190.

False

With this pool, it is possible to build 4 sub-networks with 10 terminals each.

True

The network mask is 255.255.255.224.

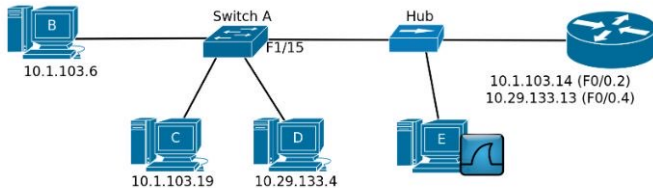
False

Terminal with address 200.100.4.92 belongs to this network.

F True

*Estão aqui 24 de 32 perguntas
Sinx 17,5 → errei 4 e 3 delas estão corrigidas*

Grading: right answer: 25%, wrong answer: -12%, no answer: 0%



Considering the above network where all PCs have the indicated IPv4 addresses with a 255.255.255.0 mask and the correct gateway configured. The router has two sub-interfaces associated respectively to VLAN 2 and 4. Switch A has port F1/15 configured as trunk/inter-switch. There are connectivity between all terminals. PC E is capturing packets. Answer True or False to the following sentences:

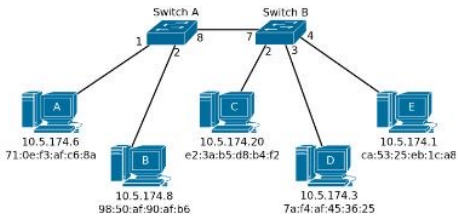
PC D and PC B are connected to Switch A using access ports associated with the same VLAN.

After performing one PING from PC D to 10.29.133.13, PC E will capture ICMP packets with a 802.1Q VLAN tag equal to 4.

After performing one PING from PC B to PC D, PC E will capture ICMP packets only with a 802.1Q VLAN tag equal to 2.

After sending one ICMP Echo Request packet from PC B to 10.29.133.13, PC E will capture only one ICMP Echo Request packet.

Grading: right answer: 25%, wrong answer: -12%, no answer: 0%



Considering the above network where all PCs have the respective indicated MAC and IPv4 addresses. The address mask configured in all PCs is 255.255.255.0. Answer True or False to the following sentences:

Switch B may have the following forwarding table:

VID	VLAN Name	MAC Address	Port	Type
1	default	98-50-af-90-af-b6	7	Dynamic
1	default	e2-3a-b5-d8-b4-f2	2	Dynamic

True

After performing a PING from PC A to the address 10.5.174.255, Switch A will have at least the following entry in the forwarding table:

VID	VLAN Name	MAC Address	Port	Type
1	default	71-0e-f3-af-c6-8a	1	Dynamic

True

Switch A may have the following forwarding table:

VID	VLAN Name	MAC Address	Port	Type
1	default	71-0e-f3-af-c6-8a	1	Dynamic
1	default	98-50-af-90-af-b6	2	Dynamic
1	default	e2-3a-b5-d8-b4-f2	8	Dynamic
1	default	7a-f4-af-45-36-25	9	Dynamic
1	default	ca-53-25-eb-1c-a8	8	Dynamic

False

After performing a PING from PC B to PC D, Switch B will have at least the following entries in the forwarding table:

VID	VLAN Name	MAC Address	Port	Type
1	default	98-50-af-90-af-b6	2	Dynamic
1	default	7a-f4-af-45-36-25	3	Dynamic

False

Packet 1

Ethernet II, Src: a5:da:3d:a2:88:88, Dst: 11:df:36:c9:57:4a

Address Resolution Protocol (reply)

Hardware type: Ethernet (1)

Protocol type: IPv4 (0x0800)

Hardware size: 6

Protocol size: 4

Opcode: reply (2)

Sender MAC address: a5:da:3d:a2:88:88

Sender IP address: 192.168.4.8

Target MAC address: 11:df:36:c9:57:4a

Target IP address: 192.168.4.2

Considering the above ARP (partial) packet captured in a LAN, answer True or False to the following sentences:

This packet may have been generated after performing a PING from a terminal with IPv4 address 192.168.4.2 to the terminal with IPv4 address 192.168.4.8.

True

This packet will allow to create the entry "a5:da:3d:a2:88:88-192.168.4.8" on the ARP table of terminal 192.168.4.2.

True

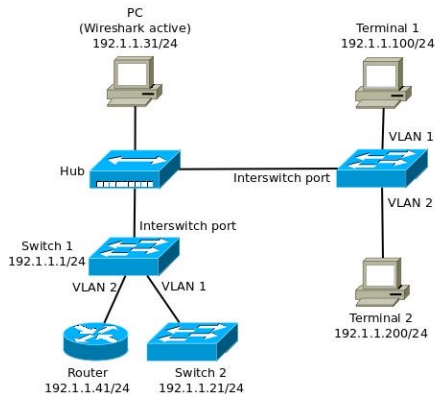
The MAC addresses 11:df:36:c9:57:4a and a5:da:3d:a2:88:88 belong to the same network interface.

True

This packet is a response to an ARP Request sent by the terminal with MAC address a5:da:3d:a2:88:88.

False

Consider the network of the following figure, where all IP addresses were configured, as well as both VLANs and the interswitch ports that are represented.



Consider that the Wireshark application is running at the PC and no communication took place between the different equipments.

Classify the following sentences as True or False:

Executing the "ping" command from Switch 2 to Switch 1, there is connectivity and one ARP packet is captured at the PC.

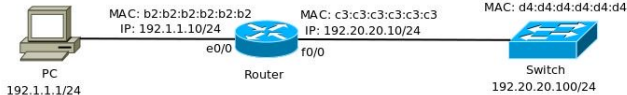
Executing the "ping" command from Switch 2 to Switch 1, there is connectivity and ARP and ICMP packets are captured at the PC.

Executing the "ping" command from Switch 2 to Terminal 2, there is no connectivity and no packets are captured at the PC.

Executing the "ping" command from Router to Terminal 1, there is no connectivity and no ARP packets are captured at the PC.

Consider that in the network of the following figure there is total connectivity between all equipments. Also suppose that a "ping" command is executed from the PC to the Switch.

MAC: a1:a1:a1:a1:a1:a1



Classify the following sentences as True or False:

In the Ethernet network between PC and Router, the ICMP Echo Request packet has destination MAC address d4:d4:d4:d4:d4:d4.

False

In the Ethernet network between PC and Router, the ICMP Echo Request packet has destination MAC address b2:b2:b2:b2:b2:b2.

False

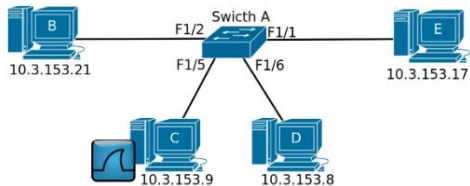
In the Ethernet network between Router and Switch, the ICMP Echo Request packet has source IP address 192.20.20.10.

True

In the Ethernet network between Router and Switch, the ICMP Echo Request packet has source IP address 192.1.1.1.

False

Grading: right answer: 25%, wrong answer: -12%, no answer: 0%



VLAN	Name	Status	Ports
1	default	active	Fa1/0, Fa1/1, Fa1/2
2	VLAN0002	active	Fa1/3, Fa1/4, Fa1/5
3	VLAN0003	active	Fa1/6, Fa1/7

Considering the above network where all PCs have the indicated IPv4 addresses with a 255.255.255.0 mask. The output of the command "show vlan-switch" at the switch is depicted above. All ARP tables are empty. PC C is running Wireshark capturing all packets. Answer True or False to the following sentences:

PC D does not have connectivity with PC E

PC B has connectivity with PC C

After performing a PING from PC D to address 10.3.153.254, PC C will capture the at least one ARP packet

After performing a PING from PC E to address 10.3.153.254, PC C will capture the at least one ARP packet