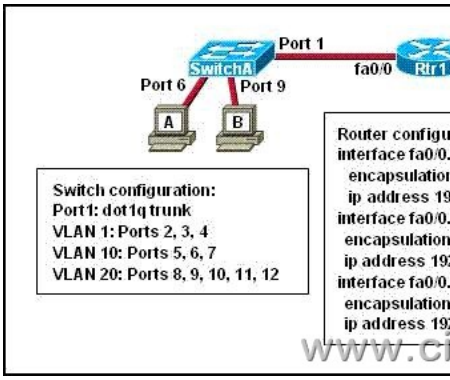
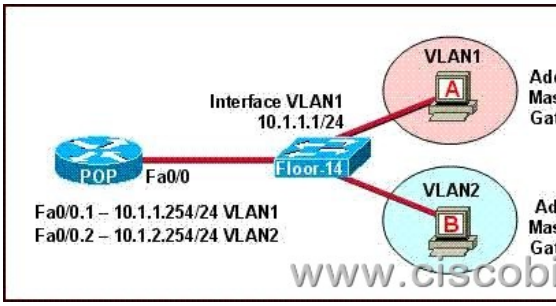
CCNA 640-802 Bible - Identify Common Problems Associated with IP Addressing and Host Configurations

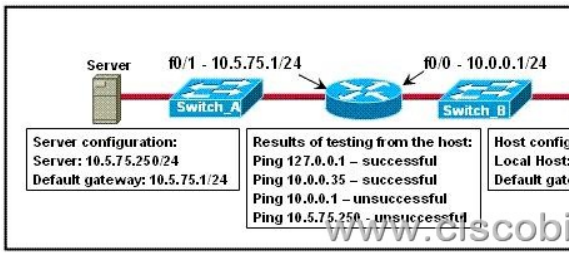
1. An administrator issues the command ping 127.0.0.1 from the command line prompt on a PC. If a reply is received, what does this confirm? A: The PC has connectivity with a local host. B: The PC has connectivity with a Layer 3 device. C: The PC has a default gateway correctly configured. D: The PC has connectivity up to Layer 5 of the OSI model. E: The PC has the TCP/IP protocol stack correctly installed. **Correct Answers: E** 2. Refer to the exhibit. A network administrator is adding two new hosts to SwitchA. Which three values could be used for the configuration of these hosts? (Choose three.)



A:host 1 IP address: 192.168.1.79 B:host 1 IP address: 192.168.1.64 C:host 1 default gateway: 192.168.1.78 D:host 2 IP address: 192.168.1.128 E:host 2 default gateway: 192.168.1.129 F:host 2 IP address: 192.168.1.190 **Correct Answers: A, C, F** Explanation: In this question, host A and host B are placed in different Vlans and they communicate with outside through Router Rtr1. On the switch, ports are put in different vlans, you must see clearly host A and host B correspond to which port separately, then you will know which vlan they belong to. Host A corresponds to port 6 and vlan 10, Host B corresponds to port 9 and vlan 20, the addresses of the same vlan must be on the same network segment. 3. The network shown in the diagram is experiencing connectivity problems. Which of the following will correct the problems? (Choose two.)

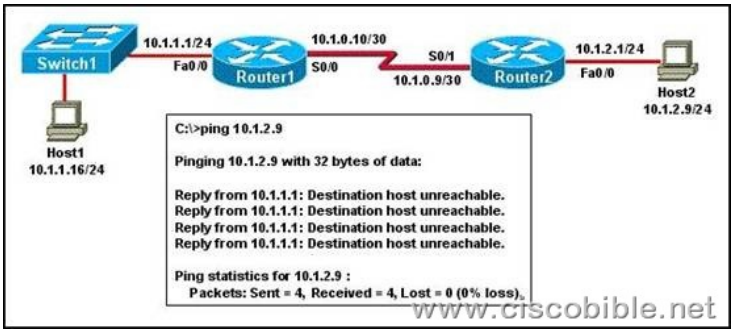


A:Configure the gateway on Host A as 10.1.1.1. B:Configure the gateway on Host B as 10.1.2.254. C:Configure the IP address of Host A as 10.1.2.2. D:Configure the IP address of Host B as 10.1.2.2. E:Configure the masks on both hosts to be 255.255.255.224. F:Configure the masks on both hosts to be 255.255.255.240. **Correct Answers: B, D** Explanation: All devices must have their default gateways set to an IP address that is in the same IP network that the station is in. Based on the diagram above, B is in VLAN2, so the default gateway for this device should be the IP address of the VLAN 2 interface on the router. In addition, the IP addresses of both devices reside within the same IP subnet. Since they belong to different VLANs, the best method to ensure proper connectivity would be to give B an IP address within the same IP range as the VLAN that it belongs to, which is VLAN2 in this example. 4. Refer to the exhibit. A technician is troubleshooting a host connectivity problem. The host is unable to ping a server connected to Switch_A. Based on the results of the testing, what could be the problem?



A: A remote physical layer problem exists. B: The host NIC is not functioning. C: TCP/IP has not been correctly installed on the

host. D: A local physical layer problem exists. **Correct Answers: D** Explanation: This question is to examine the LAN failure troubleshooting. We can conclude from the above-mentioned output information that the success of the test ping 127.0.0.1 shows that there is no problem about TCP / IP stack. And the success of the test ping 10.0.0.35 shows that the NIC is in a normal working condition. The ping gateway 10.0.0.1 fails to work means there is something wrong with the configured default gateway and the default gateway itself, which causes the failure of the ping server 10.5.75.250. We can conclude that the problem is the local physical layer. 5. Refer to the exhibit. A network administrator attempts to ping Host2 from Host1 and receives the results that are shown. What is a possible problem?



A: The link between Host1 and Switch1 is down. B: TCP/IP is not functioning on Host1 C: The link between Router1 and Router2 is down. D: The default gateway on Host1 is incorrect. E: Interface Fa0/0 on Router1 is shutdown. F: The link between Switch1 and Router1 is down. **Correct Answers: C** Explanation: When Host1 attempts to ping Host2, it will first send ARP request to Host2. The Router1 will receive this ARP request and find the reachable route of the destination host by IP addressing. On the basis of the exhibit provided, when the Router1 performs addressing, the interface Fa0/0 gives back the information that the destination host is unreachable, which indicates that the link between the Router1 and Router2 is down.