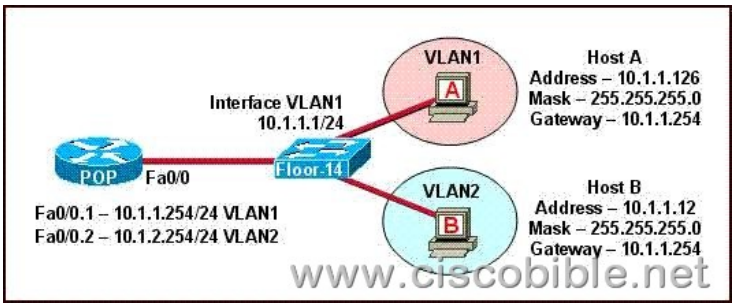
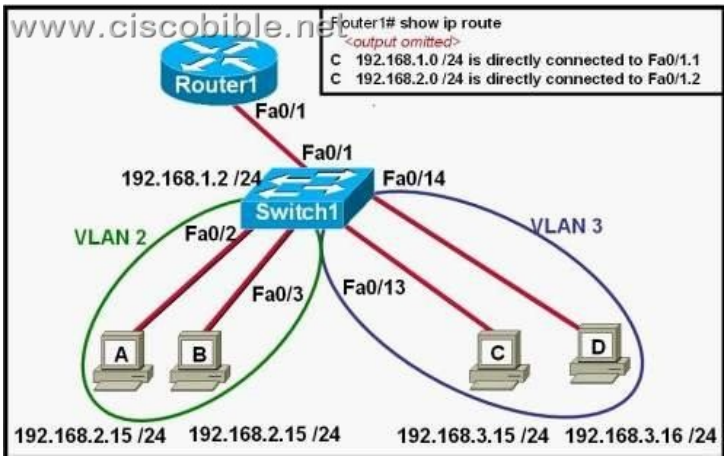
CCNA 640-802 Bible - Configure,Verify and Troubleshoot InterVLAN

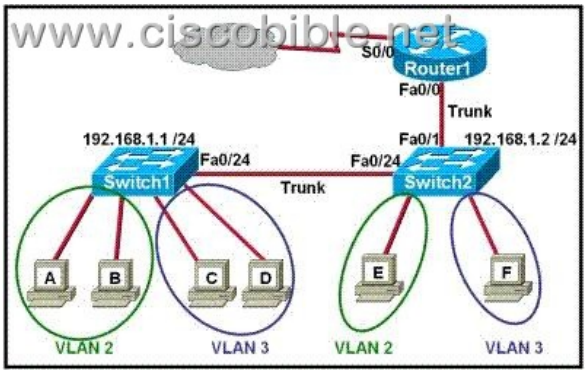
1.The network shown in the diagram is experiencing connectivity problems. Which of the following will correct the problems? (Choose two.)



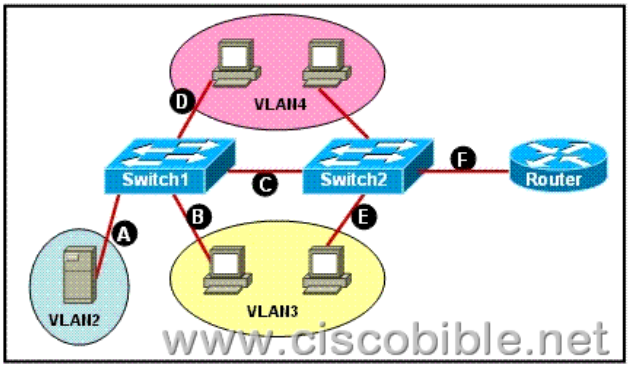
A:Configure the gateway on Host A as 10.1.1.1. B:Configure the gateway on Host B as 10.1.2.254. C:Configure the IP address of Host A as 10.1.2.2. D:Configure the IP address of Host B as 10.1.2.2. E:Configure the masks on both hosts to be 255.255.255.224. F:Configure the masks on both hosts to be 255.255.255.240. **Correct Answers: B, D** Explanation: By default, only hosts that are members of the same VLAN can communicate. To change this and allow inter-VLAN communication, you need a router or a layer 3 switch. Here is the example of configuring the router for inter-vlan communication RouterA(config)#int f0/0.1 RouterA(config-subif)#encapsulation ? dot1Q IEEE 802.1Q Virtual LAN RouterA(config-subif)#encapsulation dot1Q or isl VLAN ID RouterA(config-subif)# ip address x.x.x.x y.y.y.y Host B is belonging to VLAN2,so should have the IP address of VLAN 2 and gateway should be the IP address of Router's same VLAN's IP. 2. Refer to the exhibit. The network administrator has created a new VLAN on Switch1 and added host C and host D. The administrator has properly configured switch interfaces FastEthernet0/13 through FastEthernet0/24 to be members of the new VLAN. However, after the network administrator completed the configuration, host A could communicate with host B, but host A could not communicate with host C or host D. Which commands are required to resolve this problem?



A: Router(config)# interface fastethernet 0/1.3 Router(config-if)# encapsulation dot1q 3 Router(config-if)# ip address 192.168.3.1 255.255.255.0 B: Router(config)# router rip Router(config-router)# network 192.168.1.0 Router(config-router)# network 192.168.2.0 Router(config-router)# network 192.168.3.0 C: Switch1# vlan database Switch1(vlan)# vtp v2-mode Switch1(vlan)# vtp domain cisco Switch1(vlan)# vtp server D: Switch1(config)# interface fastethernet 0/1 Switch1(config-if)# switchport mode trunk Switch1(config-if)# switchport trunk encapsulation isl **Correct Answers: A** Explanation: Here is the example of configuring the router for inter-vlan communication RouterA(config)#int f0/0.1 RouterA(config-subif)#encapsulation ? dot1Q IEEE 802.1Q Virtual LAN RouterA(config-subif)#encapsulation dot1Q or isl VLAN ID RouterA(config-subif)# ip address x.x.x.x y.y.y.y 3. Refer to the exhibit. Which two statements are true about interVLAN routing in the topology that is shown in the exhibit? (Choose two.)



A:Host E and host F use the same IP gateway address. B:Router1 and Switch2 should be connected via a crossover cable. C:Router1 will not play a role in communications between host A and host D. D:The FastEthernet 0/0 interface on Router1 must be configured with subinterfaces. E:Router1 needs more LAN interfaces to accommodate the VLANs that are shown in the exhibit. F:The FastEthernet 0/0 interface on Router1 and Switch2 trunk ports must be configured using the same encapsulation type.
Correct Answers: D, F 4. Refer to the exhibit. A network associate needs to configure the switches and router in the graphic so that the hosts in VLAN3 and VLAN4 can communicate with the enterprise server in VLAN2. Which two Ethernet segments would need to be configured as trunk links? (Choose two.)



A. A B. B C. C D. D E. E F. F Answer: CF