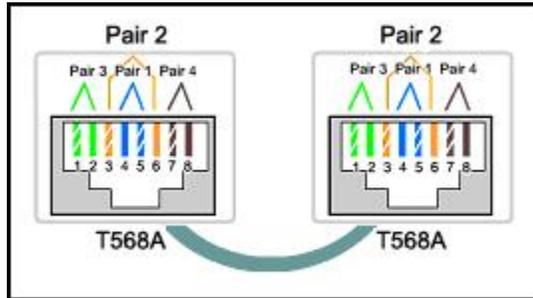


ENetwork Final Exam - CCNA Exploration: Network Fundamentals (Version 4.0)

MAY 2010 %94.1 percent , Final Exam

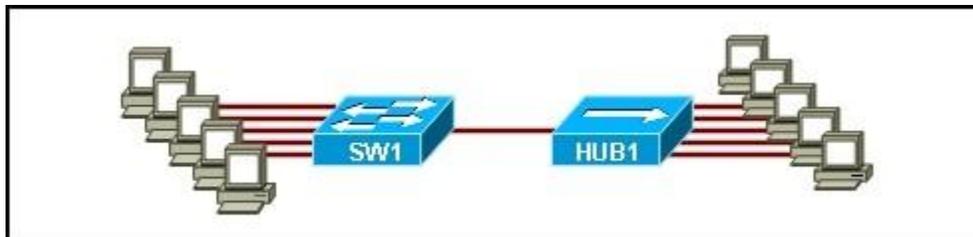
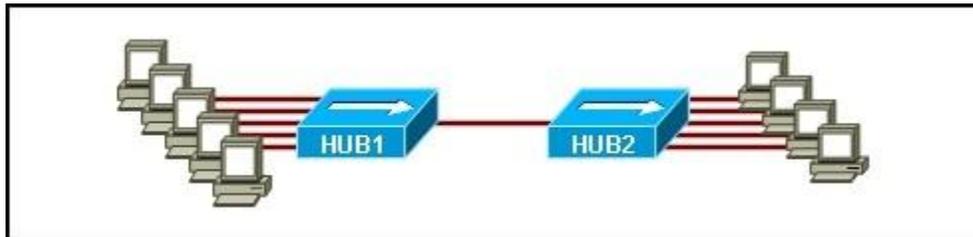
1

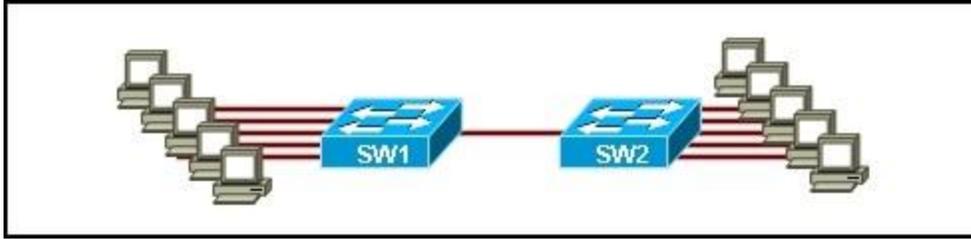


Refer to the exhibit. While configuring a network, a technician wired each end of a Category 5e cable as shown. Which two statements are true about this setup? (Choose two.)

- The cable is suitable for connecting a switch to a router Ethernet port.
- The cable is suitable for connecting dissimilar types of devices.
- The cable is unusable and must be rewired.
- The cable is terminated in a way that the transmit pin is wired to the receive pin.
- The cable simulates a point-to-point WAN link.

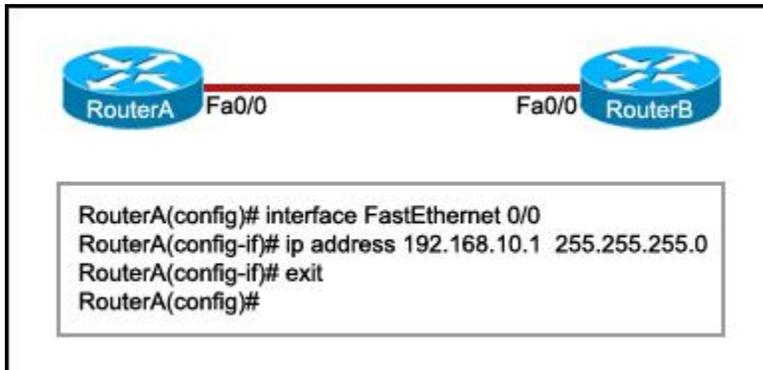
2 Which topology divides the collision domain and provides full media bandwidth to the hosts in the network?





- 3 To make a server application accessible by clients, a network administrator wants to configure the port number that the application use. From which range of numbers should the port number be assigned?
- 0 to 255
 - 0 to 1023
 - 1024 to 49151
 - 49152 to 65535

4



Refer to the exhibit. RouterB is configured properly. The Ethernet interface Fa0/0 of RouterA is configured with the use of the commands that are shown. However, a ping from the Fa0/0 interface of RouterA to the Fa0/0 interface of RouterB is unsuccessful. What action should be taken on RouterA to solve this problem?

- Use the **description** command on the FastEthernet interface Fa0/0.
 - Configure the clock rate of the FastEthernet interface Fa0/0.
 - Use the **no shutdown** command on the FastEthernet interface Fa0/0.
 - Reboot the router.
- 5 Which configuration mode is used to set a password to authenticate users that are accessing and configuring the network device using Telnet connection?
- VTY line mode
 - interface mode
 - console line mode

global configuration mode

6 Which prompt represents the appropriate mode used for the **copy running-config startup-config** command ?

Switch-6J>

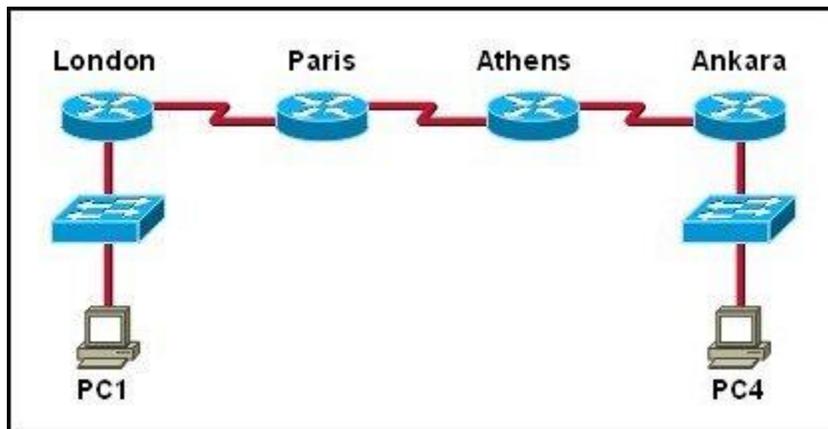
Switch-6J#

Switch-6J(config)#

Switch-6J(config-if)#

Switch-6J(config-line)#

7



Refer to the exhibit. The **tracert** command is initiated from PC1 to PC4. Which device will send a response to the initial **tracert** packet from PC1?

Athens

Ankara

London

Paris

PC4

8

```
10.0.0.24 is subnetted, 1 subnets
R 10.1.1.0 [120/1] via 172.16.1.4, 00:00:05, FastEthernet0/0
172.16.10.0/24 is subnetted, 1 subnets
R 172.16.10.0 [120/1] via 172.16.2.9, 00:00:05, FastEthernet0/1
172.16.1.0/24 is subnetted, 1 subnets
C 172.16.1.0 is directly connected, FastEthernet0/0
172.16.2.0/24 is subnetted, 1 subnets
C 172.16.2.0 is directly connected, FastEthernet0/1
S* 0.0.0.0 (1/0) via 172.16.1.4
<output omitted>
```

Refer to the exhibit. A router, the table of which is shown, receives a packet that is destined for 192.168.9.4. How will the router treat the packet?

- It will drop the packet.
- It will forward the packet via FastEthernet 0/1.
- It will forward the packet to the next hop address.
- It will forward the packet to 172.16.2.0

9 Which combination of network id and subnet mask correctly identifies all IP addresses from 172.16.128.0 through 172.16.159.255?

- 172.16.128.0 255.255.255.224
- 172.16.128.0 255.255.0.0
- 172.16.128.0 255.255.192.0
- 172.16.128.0 255.255.224.0
- 172.16.128.0 255.255.255.192

10 Which device should be used for enabling a host to communicate with another host on a different network?

- switch
- hub
- router
- host

11 Two routers are connected via their serial ports in a lab environment. The routers are configured with valid IP addresses, but they cannot ping each other. The **show interface serial0/0** command shows that the serial0/0 interface is up but the line protocol is down. What could be the cause of this problem?

- The **no shutdown** command has not been applied to the interfaces.
- The **clock rate** command has not been entered on the DCE interface.
- The interface timers are not cleared.
- The FastEthernet interface is emulating a serial interface by assigning it a timing signal.

12 Which option shows how a router will route packets to a remote network?

Interface	IP-Address	OK?	Method	Status	Protocol
FastEthernet0/0	10.16.1.65	YES	manual	up	up
FastEthernet0/1	unassigned	YES	manual	administratively down	down
Serial0/0	192.168.1.6	YES	manual	up	up
Serial0/1	192.168.1.10	YES	manual	up	up

```
Cisco IOS Software, 1841 Software (C1841-ADVIPSERVICESK9-M), Version 12.4(15)T1,
RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2007 by Cisco Systems, Inc.
Compiled Wed 18-Jul-07 04:52 by pt_team

ROM: System Bootstrap, Version 12.3(8r)T8, RELEASE SOFTWARE (fc1)
```

```
Cisco IOS Software, 1841 Software (C1841-ADVIPSERVICESK9-M), Version 12.4(15)T1,
RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2007 by Cisco Systems, Inc.
Compiled Wed 18-Jul-07 04:52 by pt_team

ROM: System Bootstrap, Version 12.3(8r)T8, RELEASE SOFTWARE (fc1)
```

```
D 192.168.1.0 [90/3193856] via 192.168.1.9, 00:00:18, Serial0/1
C 192.168.1.4 is directly connected, Serial0/0
C 192.168.1.8 is directly connected, Serial0/1
D 192.168.1.12 [90/2681856] via 192.168.1.9, 00:00:18, Serial0/1
```

13 A user sees the command prompt: Router(config-if)# . What task can be performed at this mode?

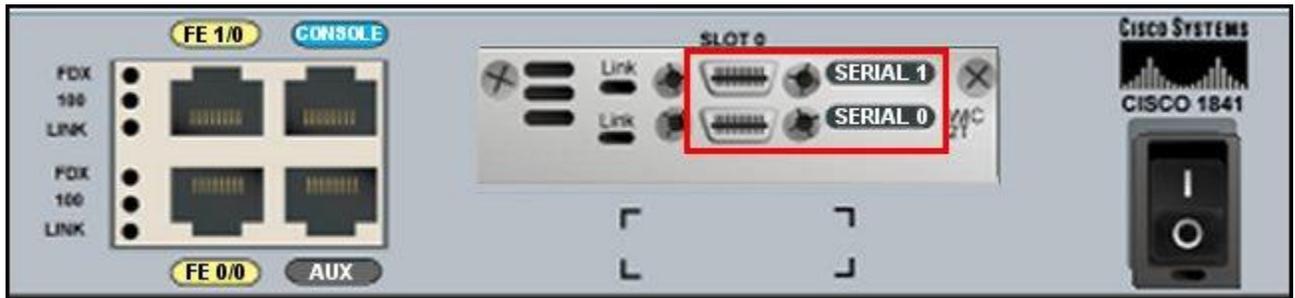
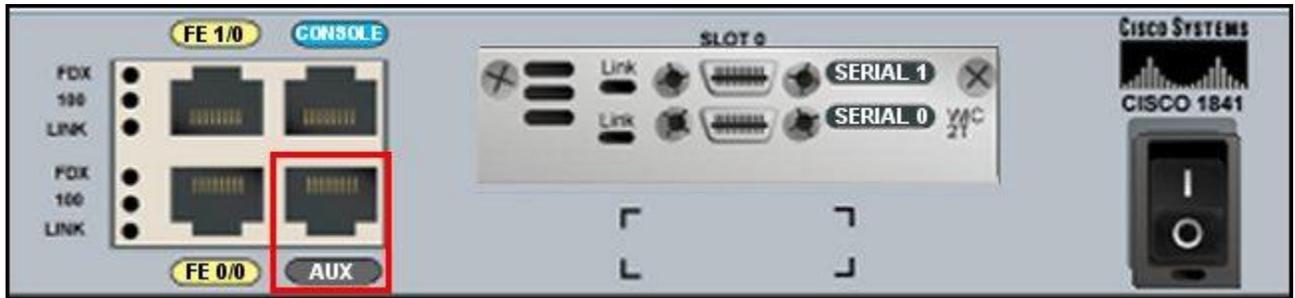
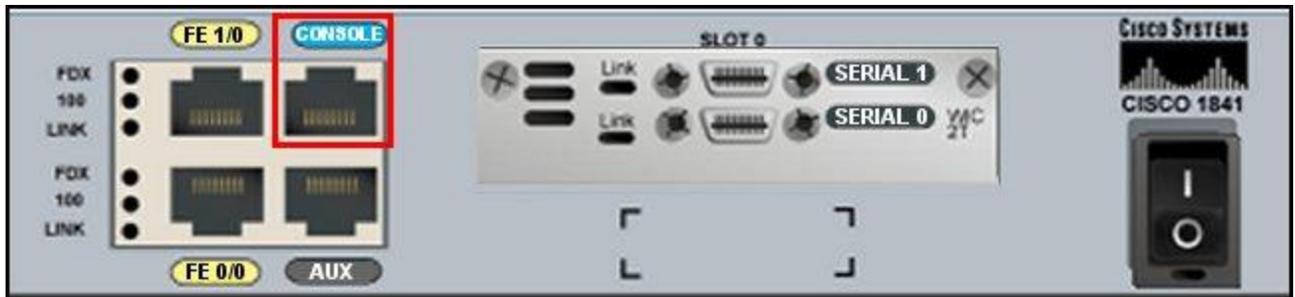
- Reload the device.
- Perform basic tests.
- Configure individual interfaces.
- Configure individual terminal lines.

14 Which router component will have contents erased when the command **erase startup-config** is issued?

- flash
- RAM
- ROM
- NVRAM

15 Which option correctly identifies the interface or interfaces used to connect the router to a CSU/DSU for WAN connectivity?

-



16 To send data through a network, what two flags are used to establish a session? (Choose two.)

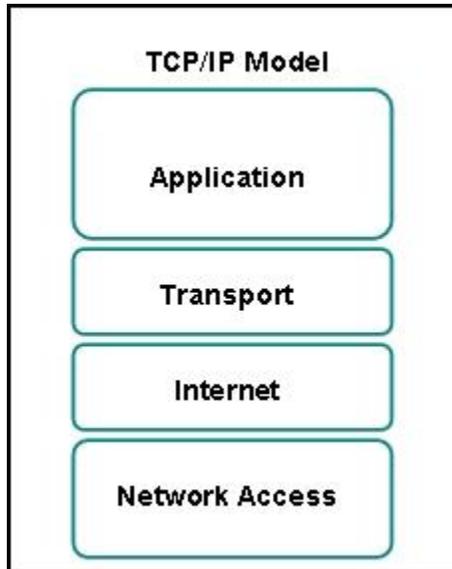
- ACK
- CRC
- SYN
- Ack #
- Port #
- Seq #

17 What happens when a node on an Ethernet network is creating a frame and it does not have the destination MAC address?

- The node drops the frame.

- The node sends out a Layer 3 broadcast message.
 - The node sends a message directly to the router for the address.
 - The node sends out an ARP request with the destination IP address.
-

18



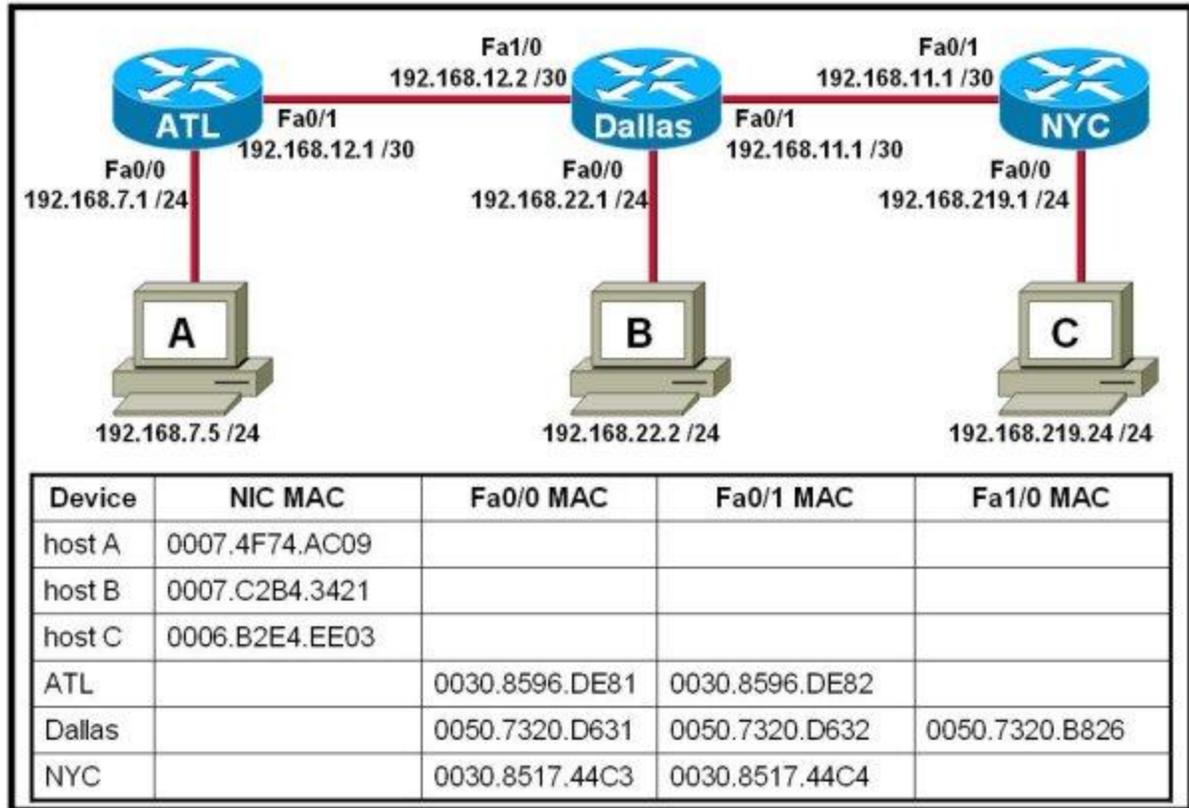
Refer to the exhibit. Which two layers of the OSI model describe the same functions as the transport and internet layers of the TCP/IP model? (Choose two.)

- application layer
 - presentation layer
 - session layer
 - transport layer
 - network layer
 - data link layer
 - physical layer
-

19 Which two types of media can provide bandwidth up to 1 Gb/s? (Choose two.)

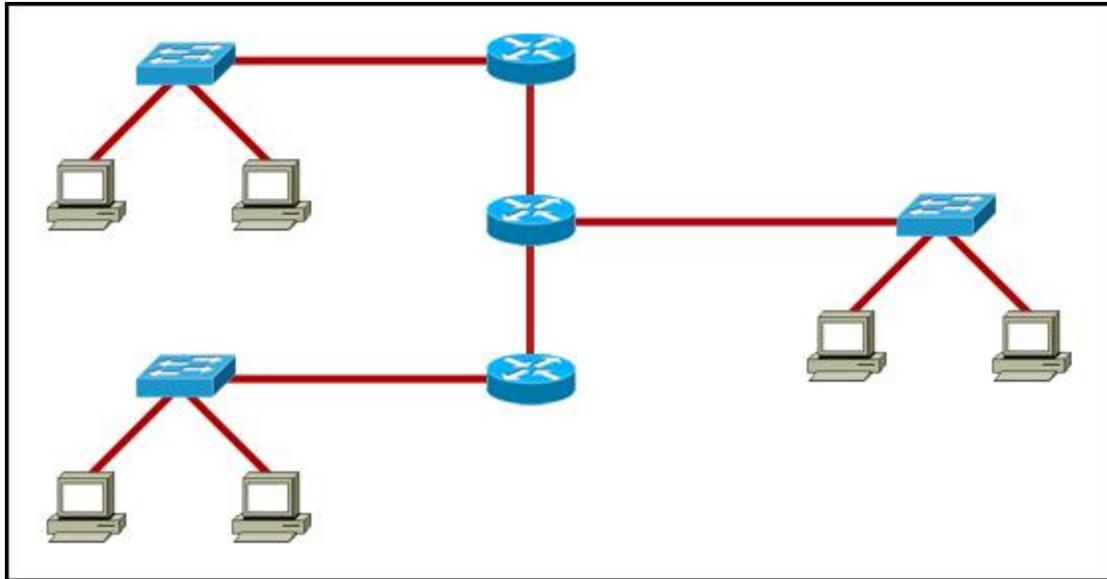
- 10 BASE-T
 - 100 BASE-T
 - 100 BASE-FX
 - 1000 BASE-TX
 - 1000 BASE-SX
-

20



Refer to the exhibit. Host A attempts to establish a TCP/IP session with host C. During this attempt, a frame was captured with the source MAC address 0050.7320.D632 and the destination MAC address 0030.8517.44C4. The packet inside the captured frame has IP source address 192.168.7.5, and the destination IP address is 192.168.219.24. At which point in the network was this packet captured?

- leaving host A
- leaving ATL
- leaving Dallas
- leaving NYC



Refer to the exhibit. All devices in the network use default configurations. How many broadcast domains are there in this topology?

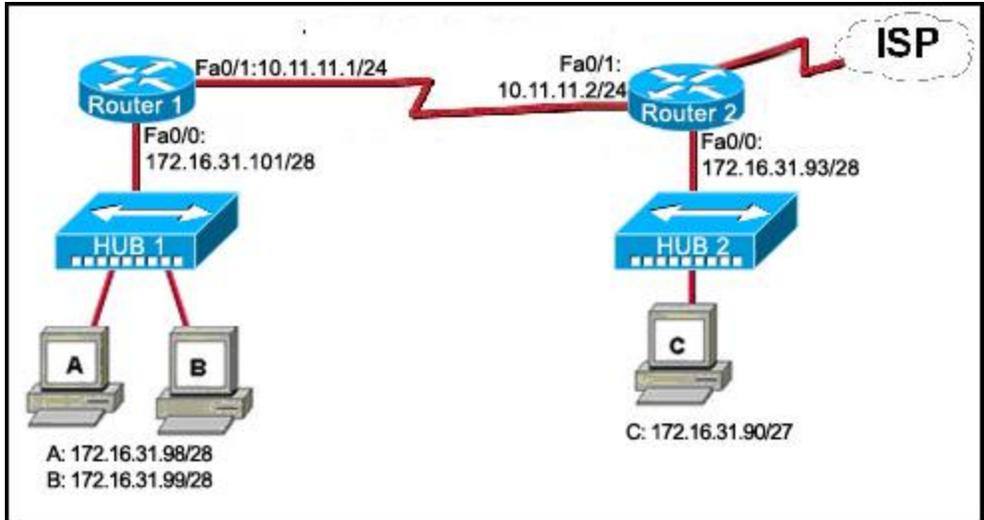
- 3
- 5
- 7
- 9
- 11

22 To enhance security in a network, the network administrator uses these commands:

```
Router(config)# line console 0
Router(config-line)# password j1mdi2
Router(config-line)# login
```

What two conclusions are evident from these commands? (Choose two.)

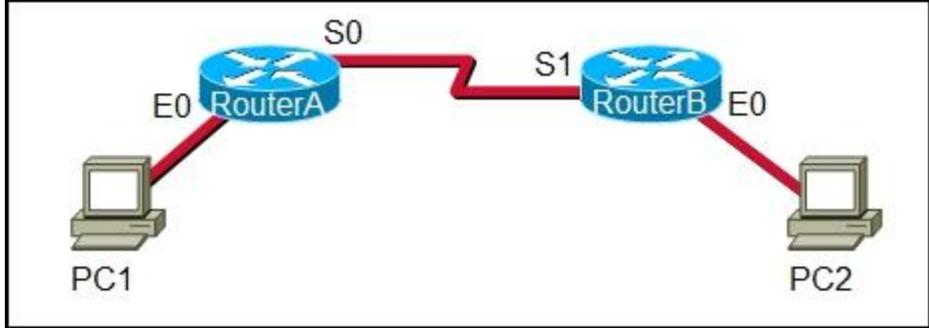
- Users who attempt to connect to the console port of the router must enter a password.
- The entries permit access through the console by the use of j1mdi2 as the password.
- The entries eliminate the need for authentication.
- Access through the console will be denied because the console configuration is incomplete.
- The entries prevent passwords from being displayed as plain text.



Refer to the exhibit. Host C is able to ping 127.0.0.1 successfully, but is unable to communicate with hosts A and B in the organization. What is the likely cause of the problem?

- Hosts A and B are not on the same subnet as host C.
- The IP addresses on the router serial interfaces are wrong.
- The subnet mask on host C is improperly configured.
- The FastEthernet interface fa0/0 of router 1 is wrongly configured.

24



Refer to the exhibit. A network administrator remotely accesses the CLI of RouterB from PC1 using Telnet. Which statement is true about this connection?

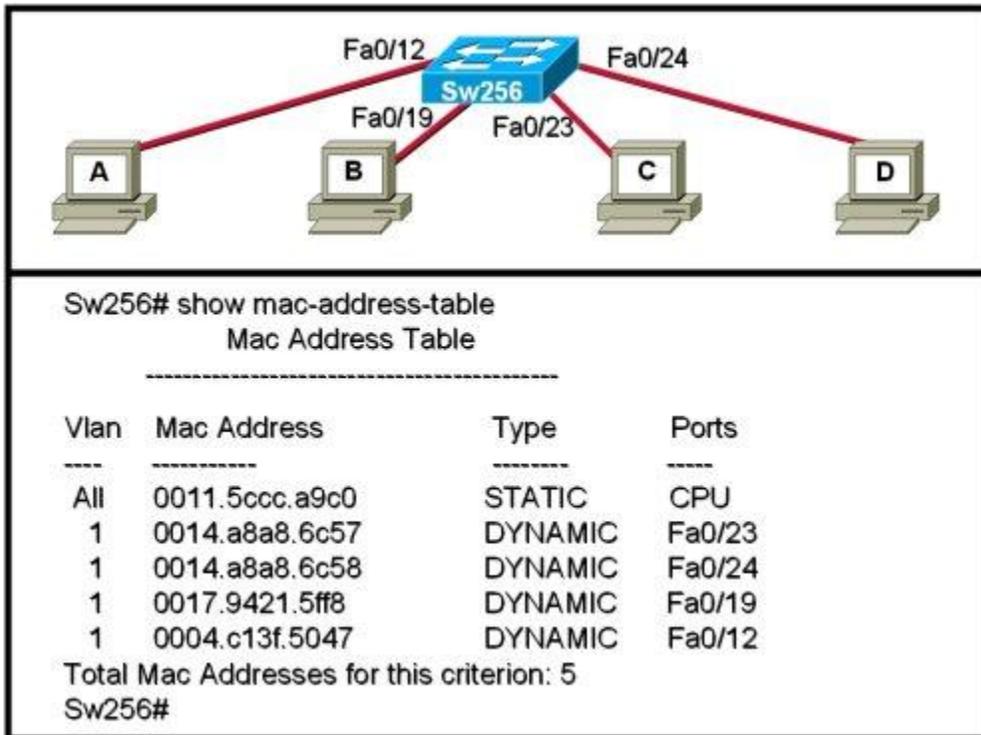
- The data is automatically encrypted.
- A Telnet server process is running on PC1.
- The connection is made through a VTY session on the router.
- A GET request was sent to RouterB to retrieve data during this session.

25

By using the **ipconfig** command, a network administrator determines that a workstation has the address 192.168.3.38 with 29 bits of the subnet mask. To what network does the workstation belong?

- 192.168.3.8
- 192.168.3.16
- 192.168.3.24
- 192.168.3.32

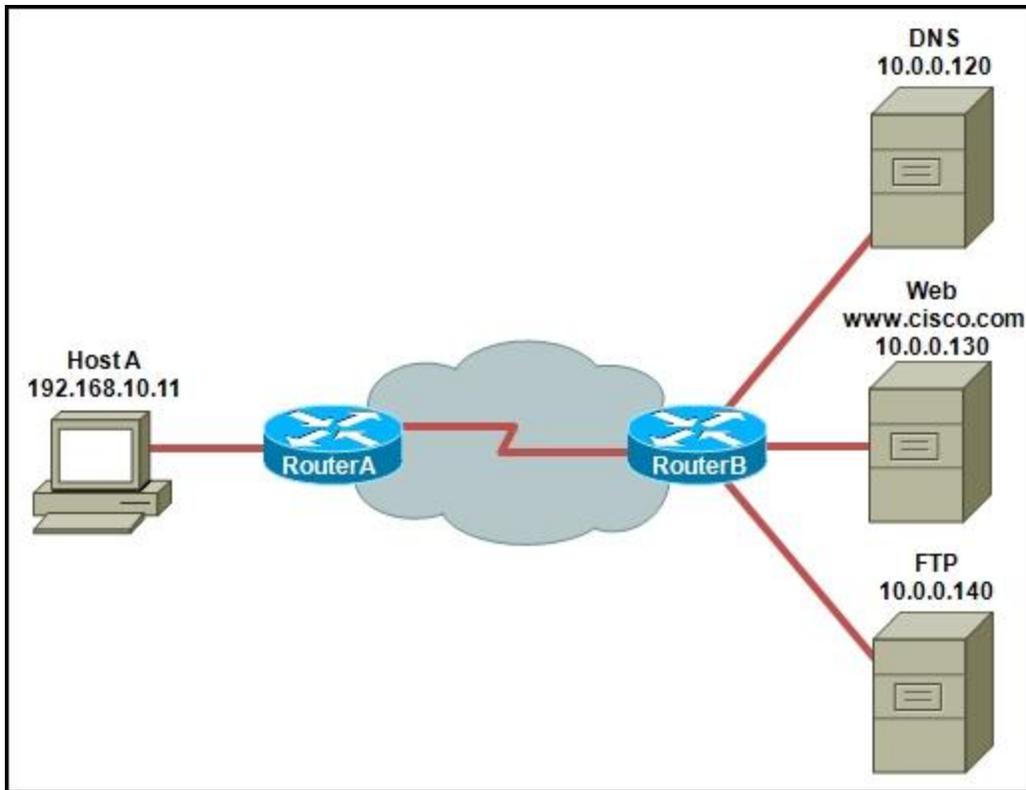
26



Refer to the exhibit. When computer A sends a frame to computer D, what computers receive the frame?

- only computer D
- only computer A and computer D
- only computer B, computer C, and computer D
- all computers

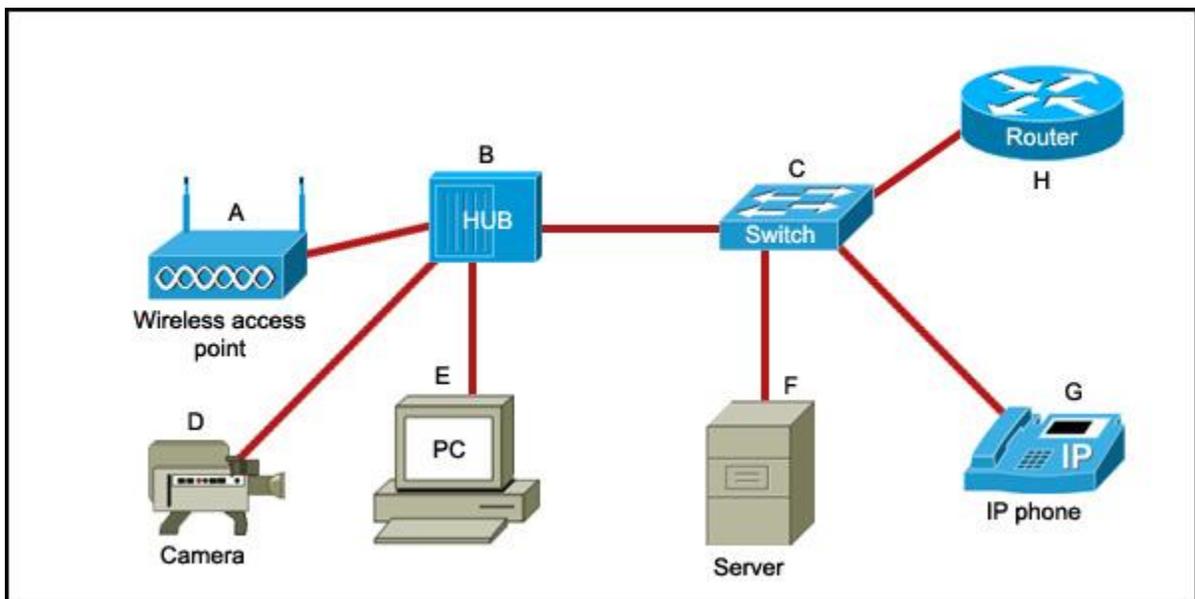
27



Refer to the exhibit. Host A is requesting a web page from the web server. Which option represents the socket to which the request is made?

- 80
- www.cisco.com
- 10.0.0.130
- 10.0.0.130:80

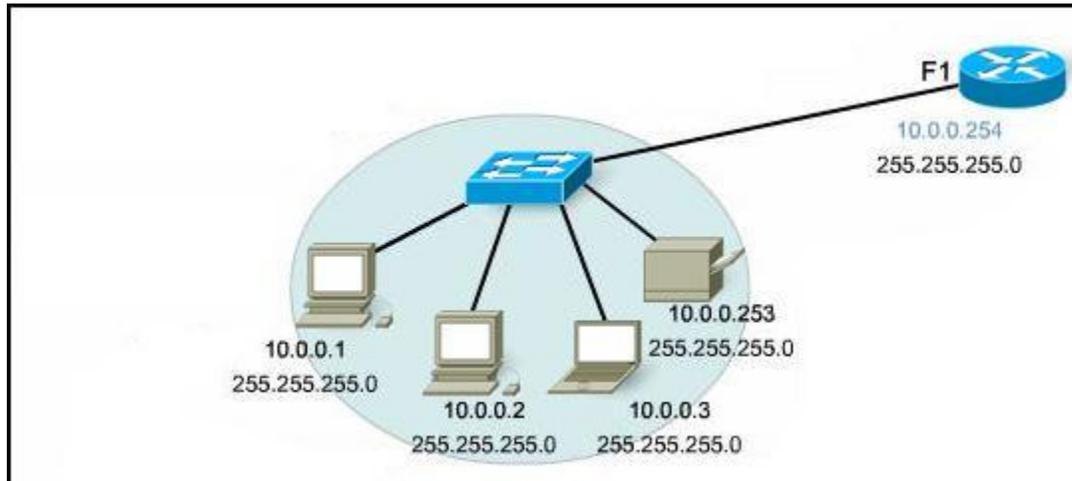
28



Refer to the exhibit. Which list refers only to end devices?

- D,E,F,G
- A,H,B,C
- A,D,E,F
- A,D,E,G

29



Refer to the exhibit. A PC is connected to a network. Which action will verify that the PC can communicate with its default gateway?

- Use the **ping 127.0.0.1** command.
 - Use the **ipconfig** command.
 - Use the **ipconfig/all** command.
 - Use the **ping 10.0.0.254** command.
-
- 30 Which password is automatically encrypted when it is created?
- vty
 - aux
 - console
 - enable secret
 - enable password
-
- 31 An administrator has made changes to a device. The changes did not have the desired effect. What can the administrator do to reset the configuration saved in NVRAM?
- Issue the **erase flash** command.
 - Issue the **reload** command and respond **no** to the prompt that follows.
 - Issue the **erase start-up config** command.
 - Issue the **copy running-config start-up config** command.
-
- 32 What information can be gathered by using the command **netstat**?
- the default gateway
 - the routing protocol

- active TCP connections
- the locally configured subnet mask

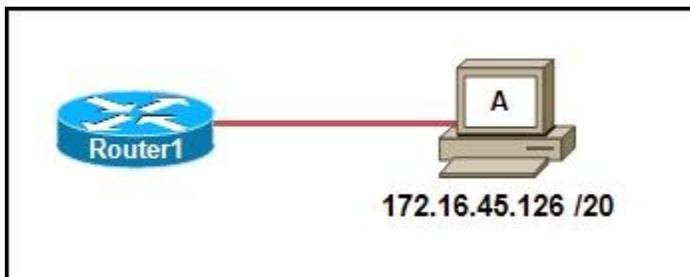
33 Which service is used when the **nslookup** command is issued on a computer?

- FTP
- DNS
- DHCP
- Telnet

34 Which of the following are the address ranges of the private IP addresses? (Choose three.)

- 10.0.0.0 to 10.255.255.255
- 200.100.50.0 to 200.100.25.255
- 150.150.0.0 to 150.150.255.255
- 172.16.0.0 to 172.31.255.255
- 192.168.0.0 to 192.168.255.255
- 127.16.0.0 to 127.31.255.255

35



Refer to the exhibit. Which option correctly identifies the network address, range of host addresses, and the broadcast address for the network that contains host A?

-

Network Address	Host Range	Broadcast Address
172.16.0.0	172.16.0.1-172.16.47.254	172.16.47.255

-

Network Address	Host Range	Broadcast Address
172.16.16.0	172.16.0.1-172.16.47.254	172.16.47.255

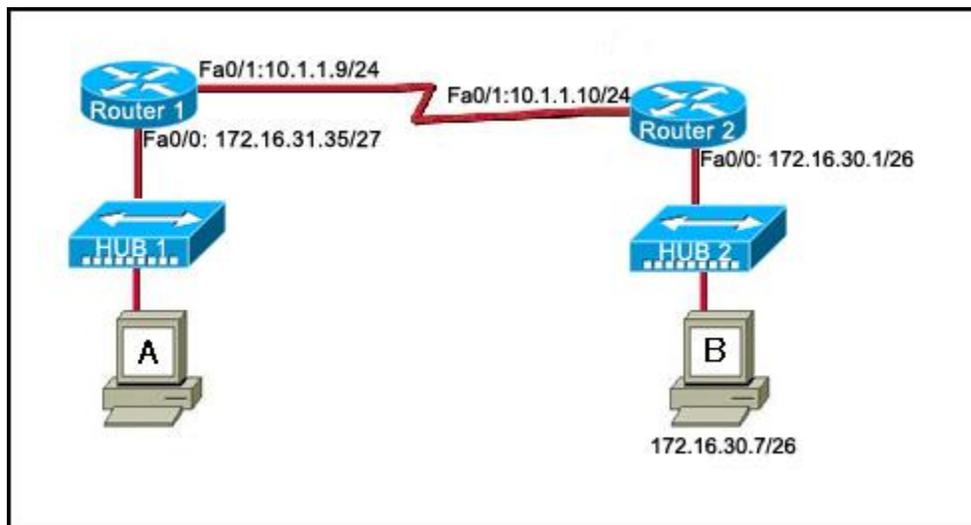
-

Network Address	Host Range	Broadcast Address
172.16.32.0	172.16.32.1-172.16.47.254	172.16.47.255

⦿

Network Address	Host Range	Broadcast Address
172.16.32.0	172.16.32.1-172.16.63.254	172.16.63.255

36



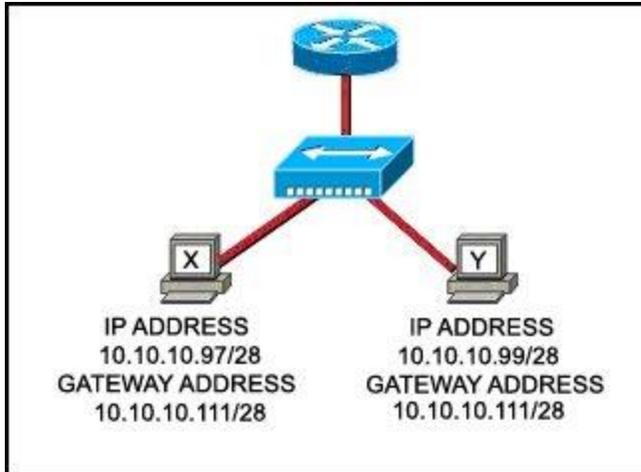
Refer to the exhibit. A host is connected to hub 1. Which combination of IP address, subnet mask, and default gateway can allow the host to function in the network?

- IP address: 172.16.31.36 Subnet mask: 255.255.255.240 Default gateway: 172.16.31.35
- IP address: 172.16.31.63 Subnet mask: 255.255.255.224 Default gateway: 172.16.31.35
- IP address: 172.16.31.29 Subnet mask: 255.255.255.248 Default gateway: 172.16.31.35
- IP address: 172.16.31.32 Subnet mask: 255.255.255.224 Default gateway: 172.16.31.35
- IP address: 172.16.31.29 Subnet mask: 255.255.255.240 Default gateway: 172.16.30.1
- IP address: 172.16.31.37 Subnet mask: 255.255.255.224 Default gateway: 172.16.31.35

37 Which application belongs to the category of the client/server model?

- using Telnet to access a router
- exchanging information via instant messaging
- printing a document to a locally connected printer
- scanning a document with a directly connected scanner

38



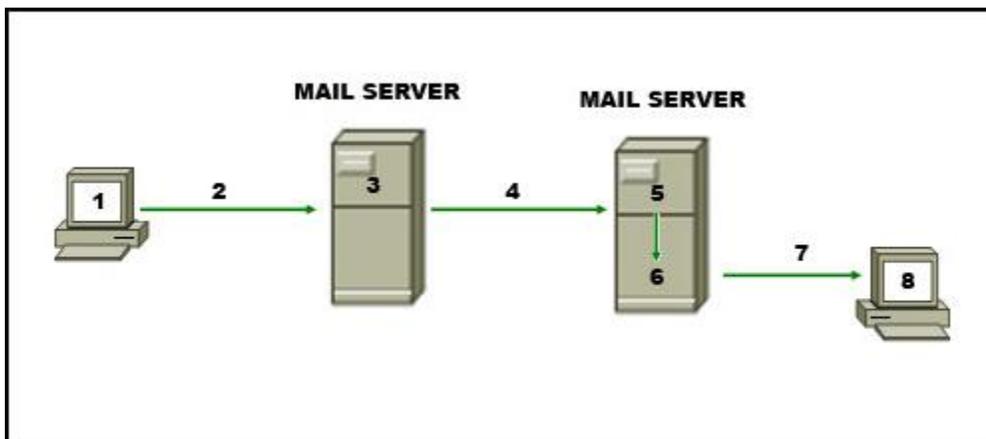
Refer to the exhibit. Communication for hosts X and Y is restricted to the local network. What is the reason for this?

- Host X is assigned a network address.
- Host Y is assigned a multicast address.
- Host X and host Y belong to different networks.
- The gateway addresses are broadcast addresses.

39 When connectionless protocols are implemented at the lower layers of the OSI model, what is usually used to acknowledge that the data was received and to request the retransmission of missing data?

- IP
- UDP
- Ethernet
- a connectionless acknowledgement
- an upper-layer, connection-oriented protocol or service

40

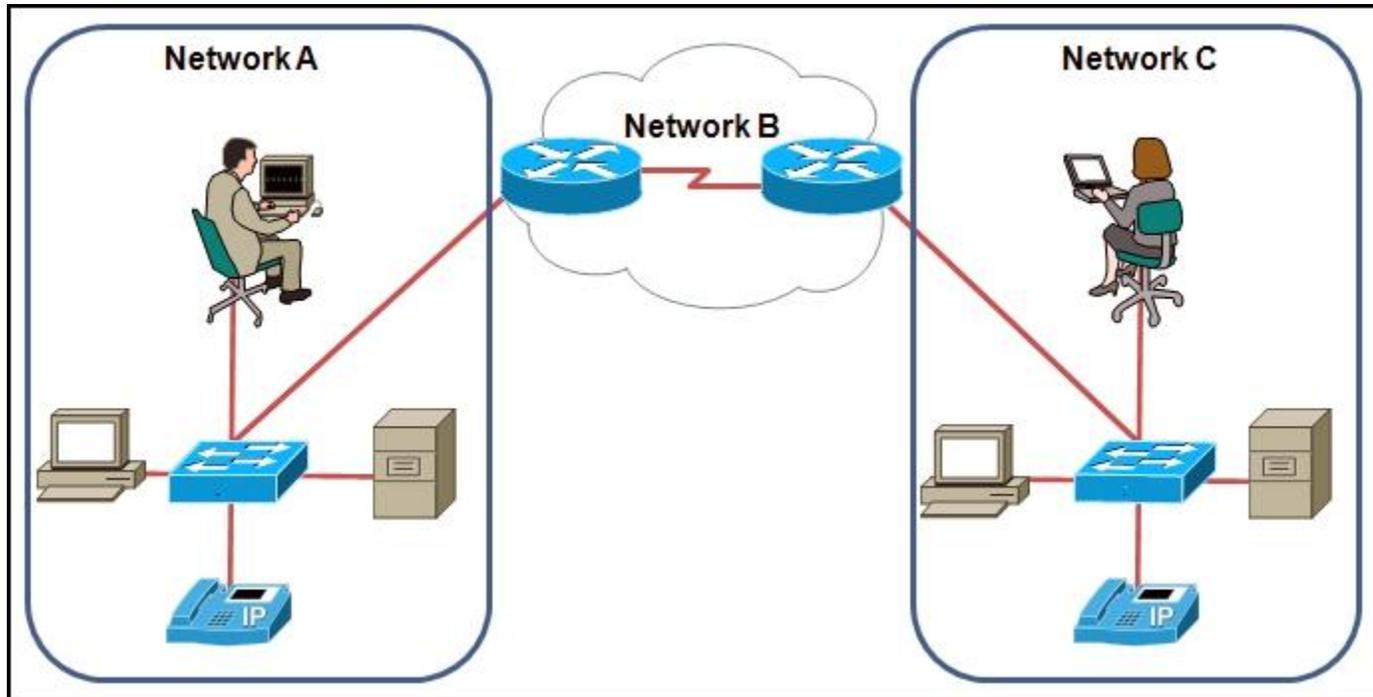


Refer to the exhibit. The diagram represents the process of sending e-mail between clients. Which list correctly identifies the component or protocol used at each numbered stage of the diagram?

- 1.MUA 2.MDA 3.MTA 4.SMTP 5.MTA 6.POP 7.MDA 8.MUA
- 1.MUA 2.POP 3.MDA 4.SMTP 5.MTA 6.MDA 7.SMTP 8.MUA

- 1.MUA 2.POP 3.SMTP 4.MDA 5.MTA 6.SMTP 7.POP 8.MUA
- 1.MUA 2.SMTP 3.MTA 4.SMTP 5.MTA 6.MDA 7.POP 8.MUA

41



Refer to the exhibit. Which Layer 2 protocol could be used inside network A and network C?

- IP
 - TCP
 - UDP
 - Ethernet
- 42 How can ARP be used to help document the network?
- It can list each hop on the way to a destination host.
 - It can show the average latency of hosts on the network.
 - It can provide a list of physical addresses on the network.
 - It can indicate which hosts are not responding to network traffic.
- 43 Which TCP/IP model layer creates additional overhead on network resources due to acknowledgments, tracking, and retransmission of data?
- internet
 - transport
 - application
 - network access
- 44 In a network design project, a network designer needs to select a device to provide collision free connections to 40 hosts on the LAN. Which device should be selected?

- hub
- router
- switch
- firewall

45 What information is contained in the header of Layer 3 to help data delivery?

- port number
- device physical address
- destination host logical address
- virtual connection identifier

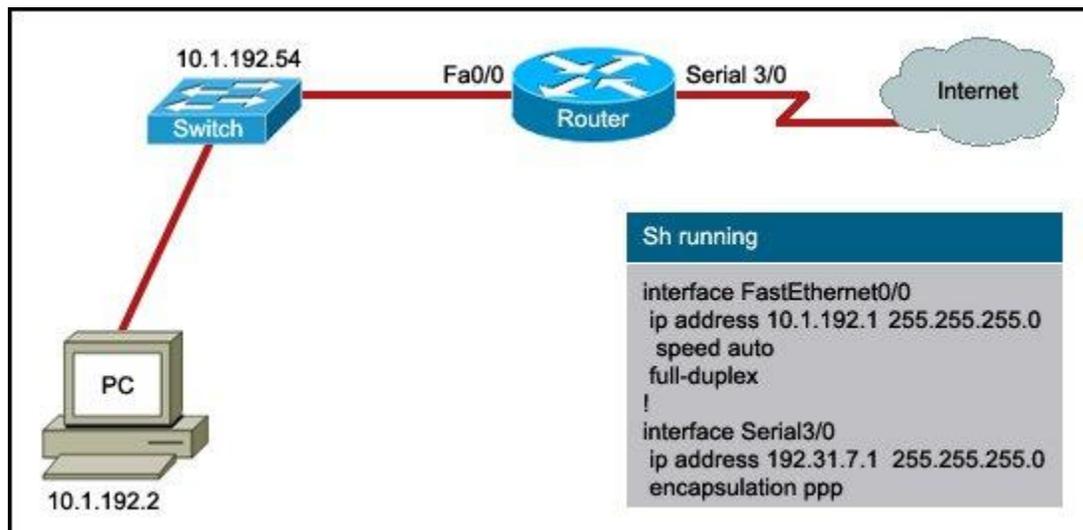
46 During the encapsulation process, what identifiers are added at the transport layer?

- source and destination IP addresses
- source and destination MAC addresses
- source and destination port numbers
- source and destination channel identifiers

47 Which statement is true about the ICMP protocol?

- It is an application layer protocol.
- It is designed to make IP a reliable protocol.
- It is often filtered out of networks for security purposes.
- If a host does not respond to an ICMP echo request, the host is not functioning.

48



Refer to the exhibit. A user wants to access the Internet from the PC. A part of the running configuration of the router is shown. Which default gateway IP address should be configured at the PC to enable this access?

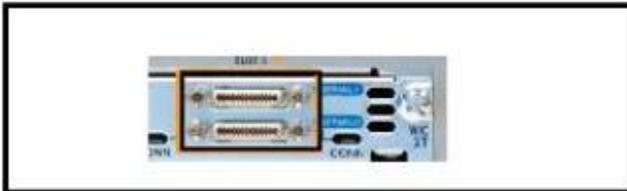
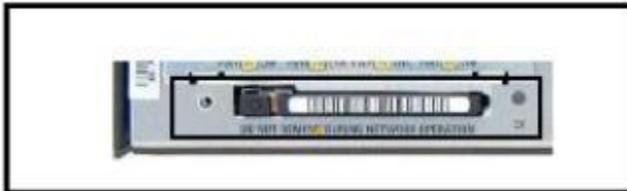
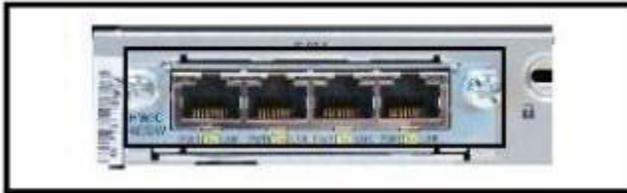
- 10.1.192.1
- 10.1.192.2

- 10.1.192.54
- 192.31.7.1

49 Which range of port numbers are reserved for services that are commonly used by applications that run on servers?

- 0 to 255
- 0 to 1023
- 1024 to 49151
- 49152 to 65535

50 Which physical component is used to access and perform the initial configuration on a new unconfigured router?



51 What happens when a host station receives a frame that contains its own MAC address in the destination field?

- The Layer 2 information is removed and the frame is pushed up to Layer 3.
- The host station will copy the information to its buffers and send it back out.

- The frame originated from the host and will be ignored.
- The Layer 3 information is added to the frame.

52 A network administrator is asked to design a new addressing scheme for a corporate network. There are 60 users in the main office, 28 users in the branch office, 28 users in manufacturing, 12 in the sales office, and 4 users in the research office. Which VLSM address scheme that uses the 192.168.88.0/24 network will fulfill the requirements while wasting the fewest addresses?

- 192.168.88.0/26 main
192.168.88.32/26 branch
192.168.88.64/26 manufacturing
192.168.88.96/27 sales
192.168.88.128/28 research
- 192.168.88.0/26 main
192.168.88.64/26 branch
192.168.88.128/27 manufacturing
192.168.88.160/28 sales
192.168.88.176/29 research
- 192.168.88.0/27 main
192.168.88.32/27 branch
192.168.88.64/28 manufacturing
192.168.88.80/29 sales
192.168.88.88/30 research
- 192.168.88.0/27 main
192.168.88.64/28 branch
192.168.88.80/28 manufacturing
192.168.88.96/29 sales
192.168.88.104/30 research

Exam Results - ENetwork Final Exam - CCNA Exploration: Network Fundamentals - Version 4.0

Date Exam was Taken: XX/05/2010

Domain Knowledge - Weighted Score	
Max Points:	101
Earned Points:	95
Percentage:	94.1%

Personalized Feedback has been generated based on your responses to this exam. [Click Here](#) to view your Personalized Feedback

Domain Knowledge - Binary Score	
Max Points:	50
Earned Points:	47
Percentage:	94.0%