CCNA 1 Final Exam Answers – UPDATE 2012 – eg.2

January 12th, 2012AdminLeave a commentGo to comments

1. When must a router serial interface be configured with the clock rate command?

when the interface is functioning as a DTE device
when the interface timers have been cleared
when the connected DTE device is shut down
when the interface is functioning as a DCE device

2. Due to a security violation, the router passwords must be changed. What information can be learned from the following configuration entries? (Choose two.)
Router(config)# **line vty 0 3**
Router(config-line)# **password c13c0**
Router(config-line)# **login**

The entries specify three Telnet lines for remote access.
The entries specify four Telnet lines for remote access.
The entries set the console and Telnet password to "c13c0".
Telnet access will be denied because the Telnet configuration is incomplete.
Access will be permitted for Telnet using "c13c0" as the password.

3. 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

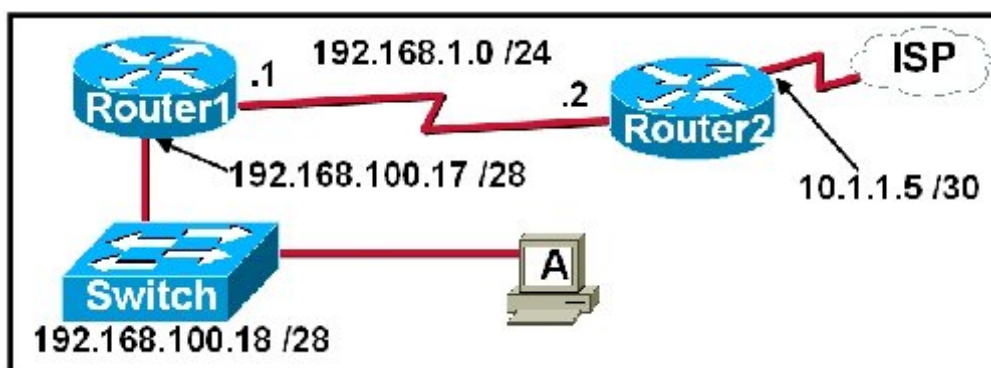**4. Which password is automatically encrypted when it is created?**

vty
aux
console
enable secret
enable password

5. Refer to the exhibit. A network technician is trying to determine the correct IP address configuration for Host A. What is a valid configuration for Host A?

IP address: 192.168.100.19; Subnet Mask: 255.255.255.248; Default Gateway: 192.16.1.2
**IP address: 192.168.100.20; Subnet Mask: 255.255.255.240; Default Gateway: 192.168.100.17**
IP address: 192.168.100.21; Subnet Mask: 255.255.255.248; Default Gateway: 192.168.100.18
IP address: 192.168.100.22; Subnet Mask: 255.255.255.240; Default Gateway: 10.1.1.5
IP address: 192.168.100.30; Subnet Mask: 255.255.255.240; Default Gateway: 192.168.1.1
IP address: 192.168.100.31; Subnet Mask: 255.255.255.240; Default Gateway: 192.168.100.18
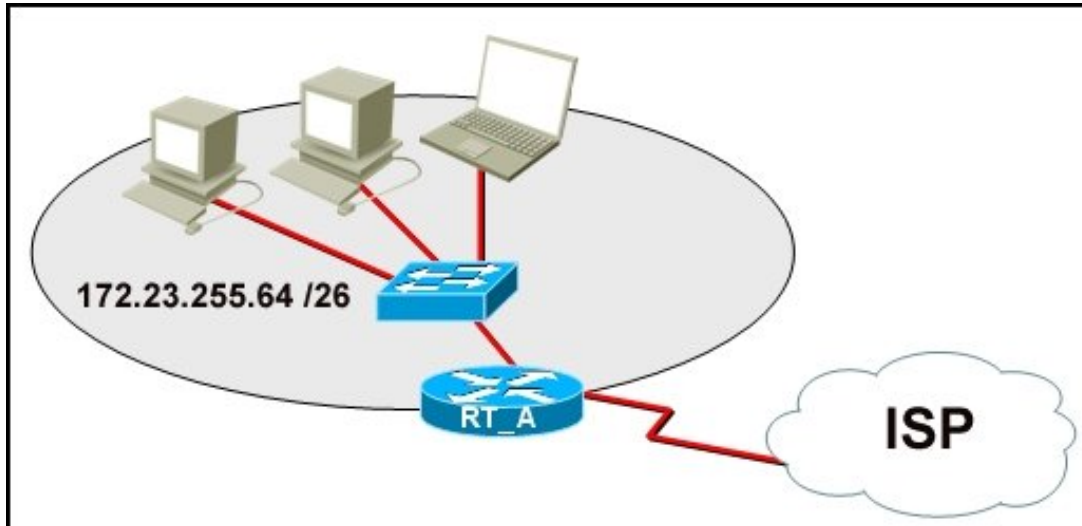
6. Refer to the exhibit. What function does router RT_A need to provide to allow Internet access for hosts in this network?

address translation
DHCP services
ftpd
web server

7. 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)#

```
C:\> ipconfig /all

Windows IP Configuration

        Host Name . . . . . . . . . . . . : md-wxp2
        Primary Dns Suffix  . . . . . . . : cisco.com
        Node Type . . . . . . . . . . .. . : Hybrid
        IP Routing Enabled. . . . . . . : No
        WINS Proxy Enabled. . . . . . . : No
        DNS Suffix Search List. . . . . . : cisco.com

Ethernet adapter Wireless Network Connection:

        Connection-specific DNS Suffix  . : cisco.com
        Description . . . . . . . . . . . . : Intel(R) PRO/Wireless 3945ABG
        Physical Address. . . . . . . . . : 00-18-DE-C7-F3-FB
        Dhcp Enabled. . . . . . . . . . . : No
        IP Address. . . . . . . . . . . . : 192.168.254.9
        Subnet Mask . . . . . . . . . . . : 255.255.255.0
        Default Gateway . . . . . . . . . : 192.168.254.1
        DNS Servers . . . . . . . . . . . : 192.168.64.196
```
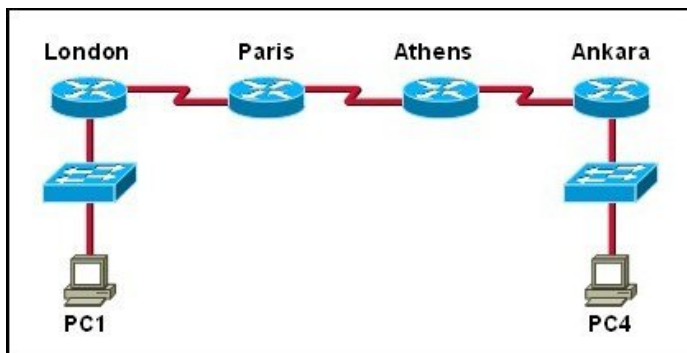
8. Refer to the exhibit. A technician is working on a network problem that requires verification of the router LAN interface. What address should be pinged from this host to confirm that the router interface is operational?

127.0.0.1
192.168.64.196
192.168.254.1
192.168.254.9
192.168.254.254

9. 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

10. Which information is used by the router to determine the path between the source and destination hosts?

the host portion of the IP address
the network portion of the IP address
host default gateway address
the MAC address
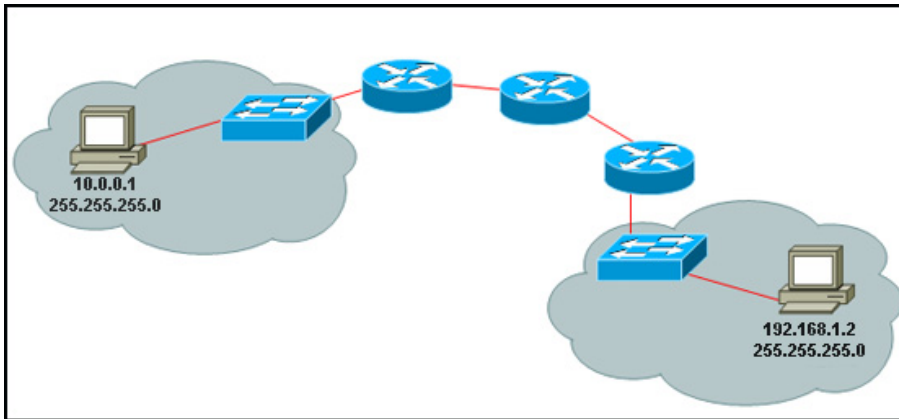
10. Refer to the exhibit. A PC is communicating with another PC on a remote network. The two networks are connected by three routers. Which action will help to identify the path between the hosts?

Use the ipconfig command at the host.
Use the ipconfig/all command at the destination.
Use the tracert command at the host.
Use the ping command at the destination.
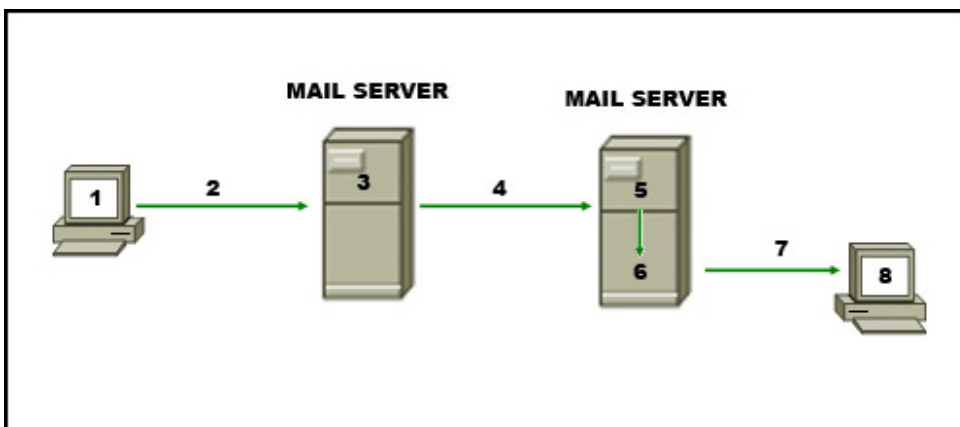
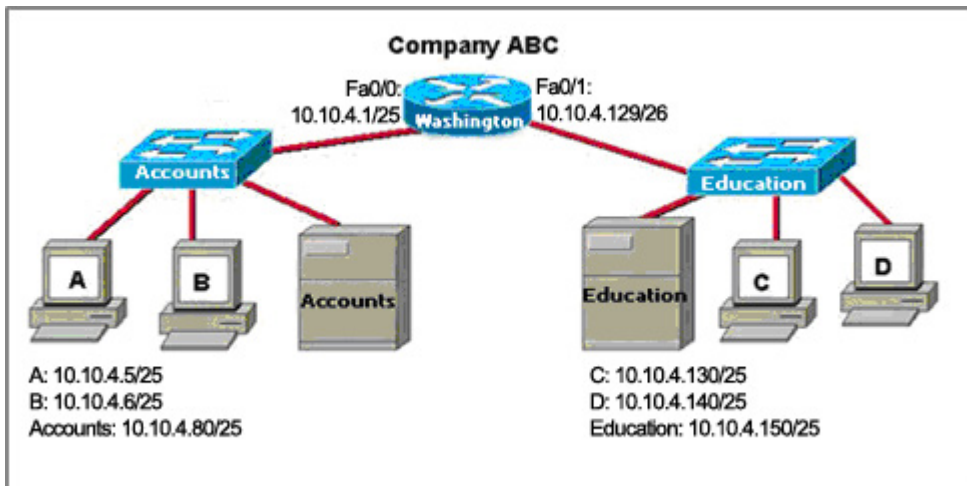**11. Refer to the exhibit. The diagram represents the process of sending e-mail between clients. Which list correctly identifies the component or protocol used at each numbered stage of the diagram?**

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

Company ABC

Fa0/0:
10.10.4.1/25 Washington

Fa0/1:
10.10.4.129/26

Accounts

A

B

Accounts

Education

Education

C

D

A: 10.10.4.5/25
B: 10.10.4.6/25
Accounts: 10.10.4.80/25

C: 10.10.4.130/25
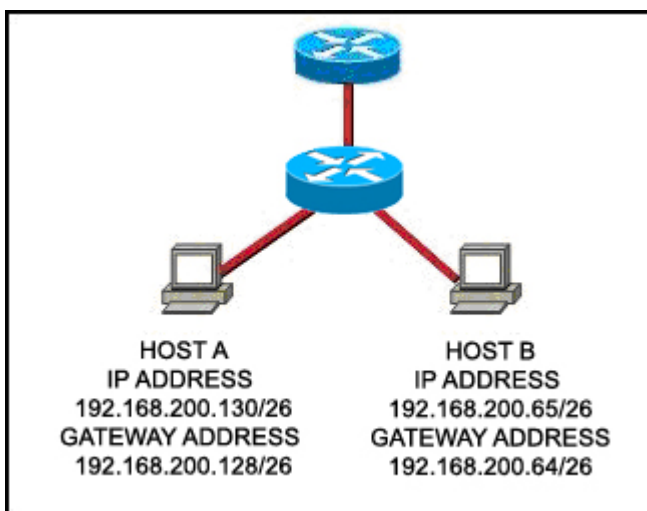D: 10.10.4.140/25
Education: 10.10.4.150/25

12. Refer to the exhibit. The router of the company failed and was replaced. After the replacement, hosts C and D in the Education office are able to ping each other, but they are unable to access the hosts in the Accounts office. What is the likely cause of the problem?

The IP address at the fa0/0 interface of the router is incorrectly configured.
The subnet mask at the fa0/1 interface of the router is incorrectly entered.
The IP address at the serial interface of the router is incorrectly configured.
The hosts in the Accounts office are not on the same subnet as the hosts in the Education office.

HOST A
IP ADDRESS
192.168.200.130/26
GATEWAY ADDRESS
192.168.200.128/26

HOST B
IP ADDRESS
192.168.200.65/26
GATEWAY ADDRESS
192.168.200.64/26

13. Refer to the exhibit. Host A and B are unable to communicate with each other. What is the reason for this?

Host A is assigned a network address.
Host B is assigned a multicast address.
Host A and host B belong to different networks.
The gateway addresses are network addresses.
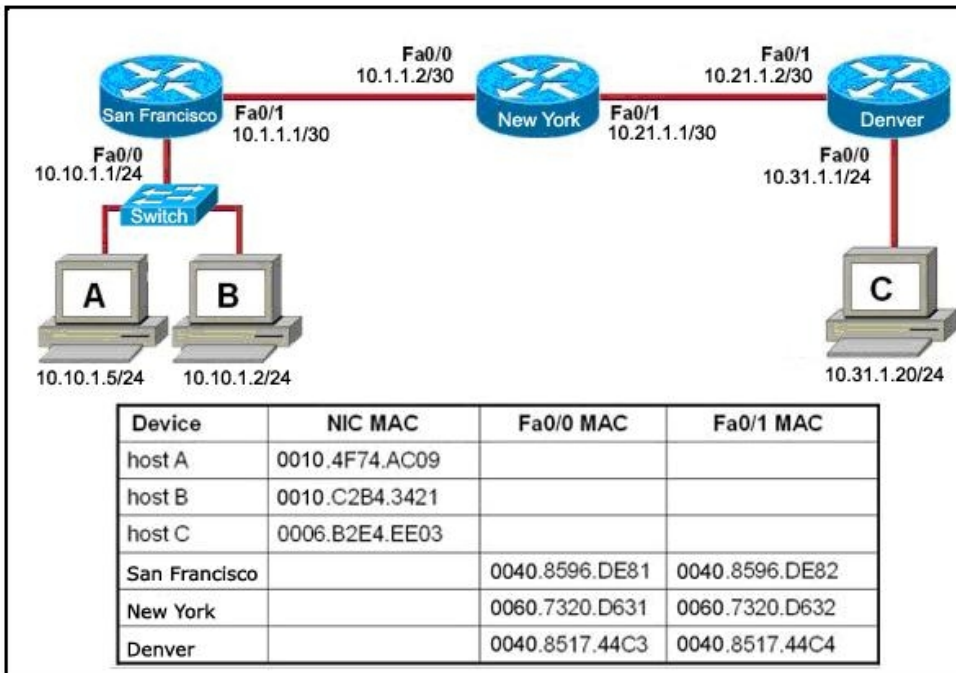
14. Refer to the exhibit. Host B attempts to establish a TCP/IP session with host C. During this attempt, a frame was captured at the FastEthernet interface fa0/1 of the San Francisco router. The packet inside the captured frame has the source IP address 10.10.1.2, and the destination IP address is 10.31.1.20. What is the destination MAC address of the frame at the time of capture?

0060.7320.D632
0060.7320.D631
0040.8517.44C3
0009.B2E4.EE03
0010.C2B4.342
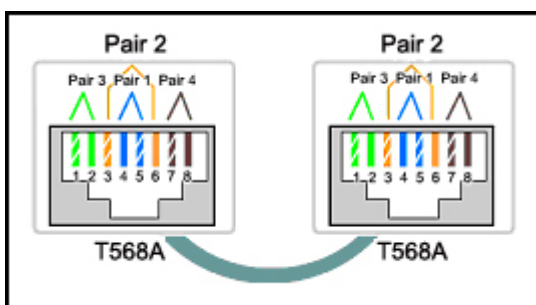
15. Refer to the exhibit. While configuring a network, a technician wired each end of a Category 5e cable as shown. Which two statements are true about this setup? (Choose two.)

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.

Sw256# show mac-address-table
Mac Address

Vlan	Mac Address	Type	Ports
All	0011.5CCC.A9C0	STATIC	CPU
1	0008.02DE.C04B	DYNAMIC	Fa0/23
1	0008.02DE.B94A	DYNAMIC	Fa0/24
1	0007.4F74.AC09	DYNAMIC	Fa0/19
1	0007.C2B4.3421	DYNAMIC	Fa0/12

Total Mac Addresses for this criterion: 5
Sw256#
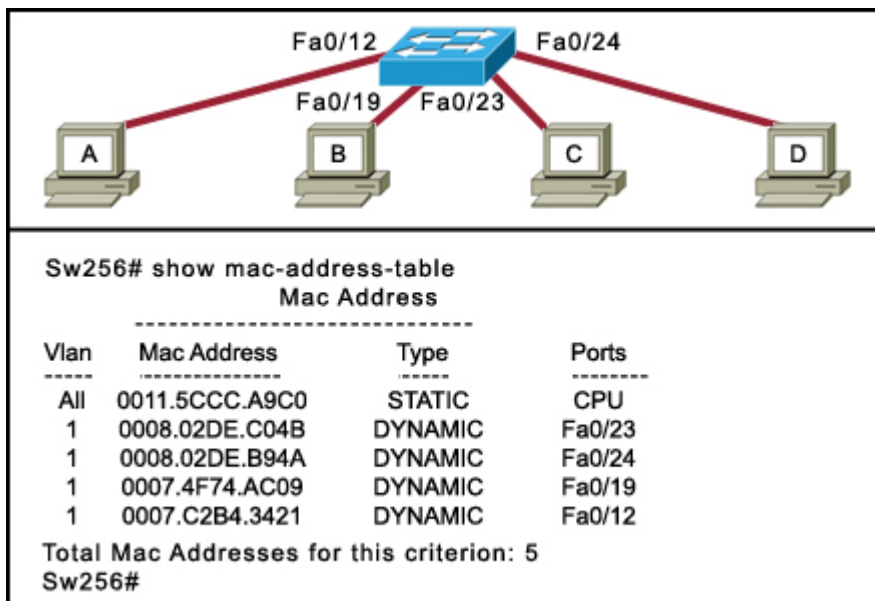
16. Refer to the exhibit. Host A sends a frame with the destination MAC address as FFFF.FFFF.FFFF. What action will the switch take for this frame?

It will drop the frame.
It will send the frame back to host A.
It will send the frame to all hosts except host A.
It will forward the frame to the default gateway.

17. Well-known services and applications use which range of TCP/UDP port numbers?

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

18. Which three IPv4 addresses represent subnet broadcast addresses? (Choose three.)

192.168.4.63 /26
192.168.4.129 /26
192.168.4.191 /26
192.168.4.51 /27
192.168.4.95 /27
192.168.4.221 /27

**19. Which three statements are true about network layer addressing? (Choose three.)**

The addresses are 48 bits long.
Network layer addressing is used by Ethernet switches to make forwarding decisions.
It uses a hierarchical structure .
It does not support broadcasts.
It uniquely identifies each host.
A portion of the address is used to identify the network.

20. Which OSI layer addressing is required to route packets between two networks?

Layer 1
Layer 2
Layer 3
Layer 4

21. What type of network is maintained if a server takes no dedicated role in the network?

mainframe
client/server
peer-to-peer
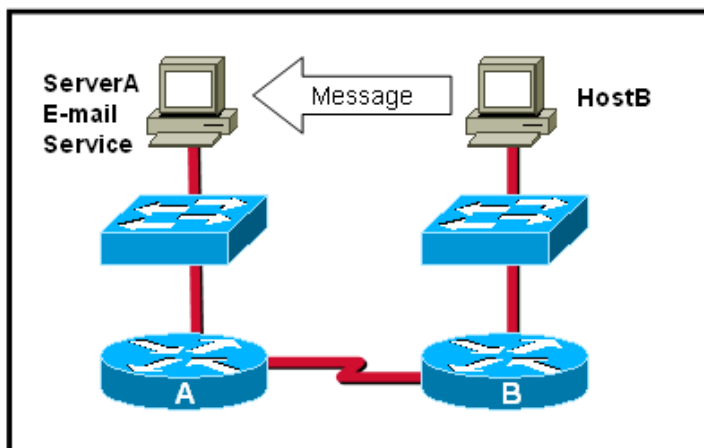centralized
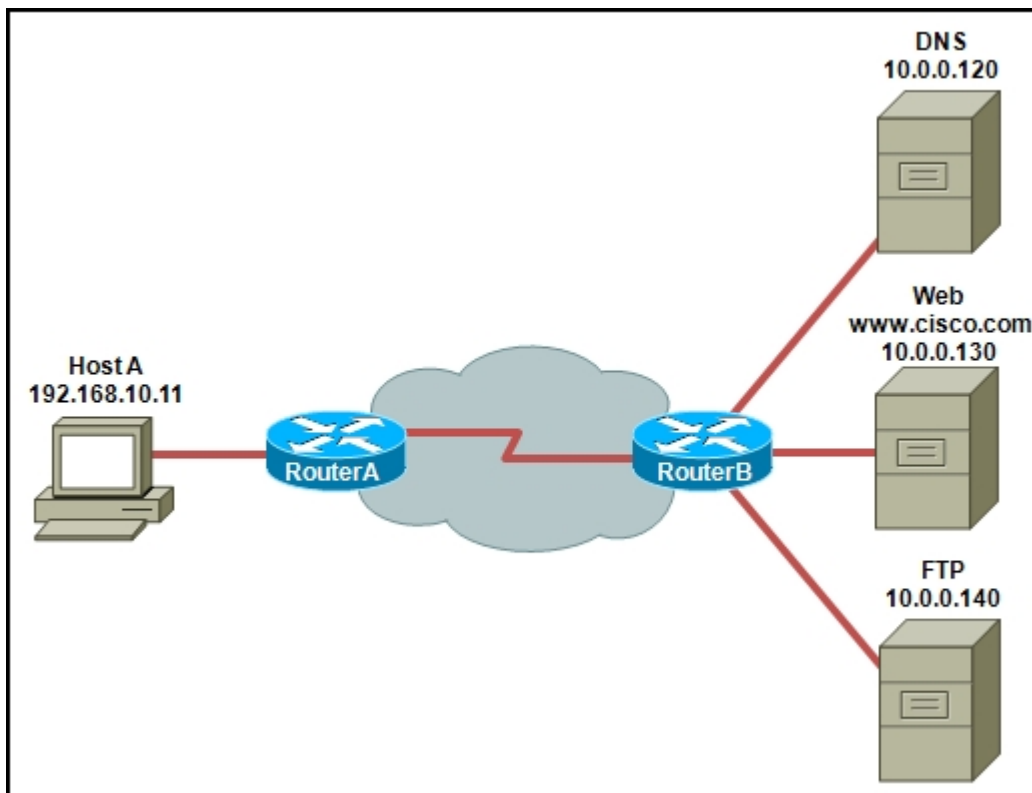
22. Refer to the exhibit. Host A is requesting a web page from the web server. Which option represents the socket to which the request is made?

80
www.cisco.com
10.0.0.130
10.0.0.130:80

23. A routing issue has occurred in your internetwork. Which of the following type of devices should be examined to isolate this error?
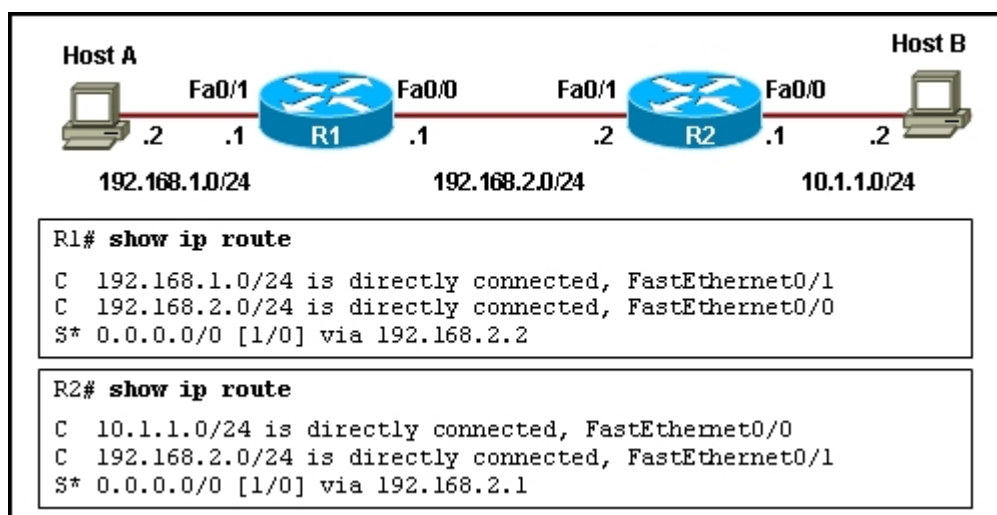
access point
host
hub
router
switch

24. Which statement describes the correct use of addresses to deliver an e-mail message from HostB to the e-mail service that is running on ServerA?

HostB uses the MAC address of ServerA as the destination.
Router B uses a Layer 3 network address to route the packet.
Router A uses the Layer 4 address to forward the packet to Router B.
Via the use of a Layer 3 address, ServerA assigns the message to the e-mail service.


```
R1# show ip route

C   192.168.1.0/24 is directly connected, FastEthernet0/1
C   192.168.2.0/24 is directly connected, FastEthernet0/0
S*  0.0.0.0/0 [1/0] via 192.168.2.2
```

```
R2# show ip route

C   10.1.1.0/24 is directly connected, FastEthernet0/0
C   192.168.2.0/24 is directly connected, FastEthernet0/1
S*  0.0.0.0/0 [1/0] via 192.168.2.1
```

25. Refer to the exhibit. Host A is configured with the correct IP address for the default gateway of the router R1 FastEthernet0/1 interface. How will a packet that is sent from host A to host B be handled by the devices on the network?

R1 will drop the packet because R1 does not have a specific route in its routing table to the 10.1.1.0/24 network.
R1 will forward the packet to its default gateway, the next hop router R2. R2 will forward the packet to the directly connected network 10.1.1.0/24.
R1 will forward the packet to its default gateway, the next hop router R2. R2 will drop the packet because it does not have a default route to network 10.1.1.0/24.
R1 will forward the packet to its default gateway, the next hop router R2. R2 will drop the packet because it does not have a route that is learned by a routing protocol to network 10.1.1.0/24.

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

This correct answer is image 4 (last image).
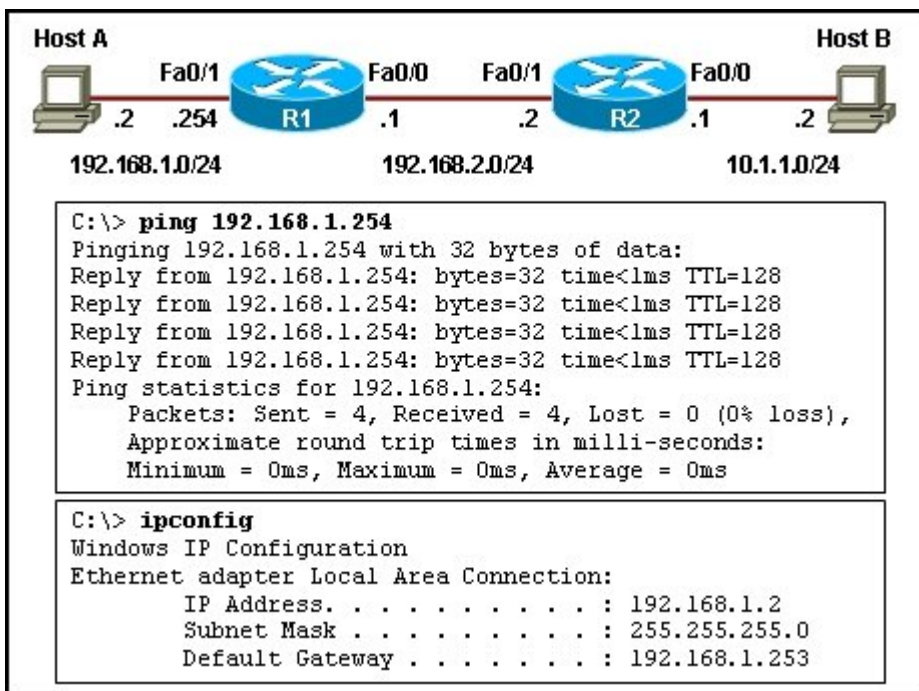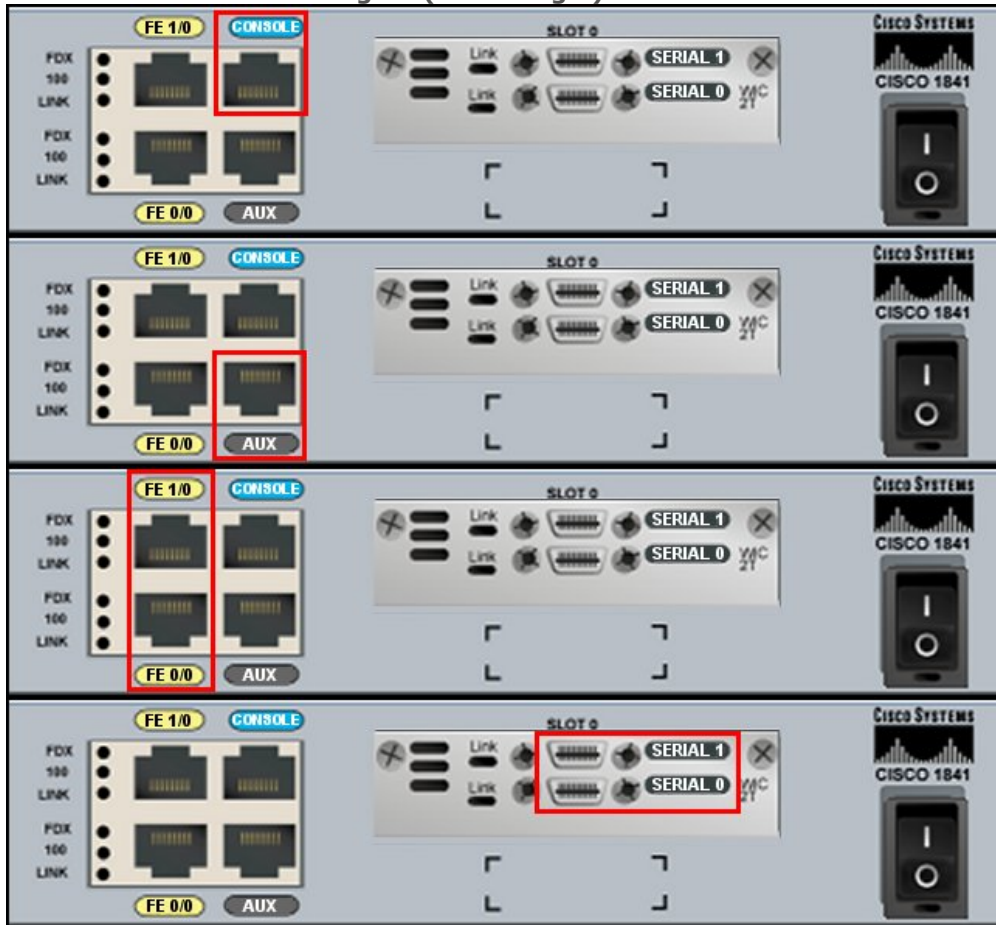
27. Refer to the exhibit. Host A is unable to reach host B on the remote network. A technician attempted to ping the local gateway and the ping was successful. To verify the host configuration, the technician issued the ipconfig command. What is the likely cause of the problem?

The local NIC is incorrectly configured.
The subnet mask on host A is incorrectly configured.
The IP address on host A is incorrectly configured.
The default gateway on host A is incorrectly configured.

28. A network administrator is configuring several switches for a network. The switches have similar configurations and only minor differences. The administrator wants to save all commands that are issued on the first switch to a text file for editing. Which transfer option should be selected in HyperTerminal?

Correct answer is image tree (3).
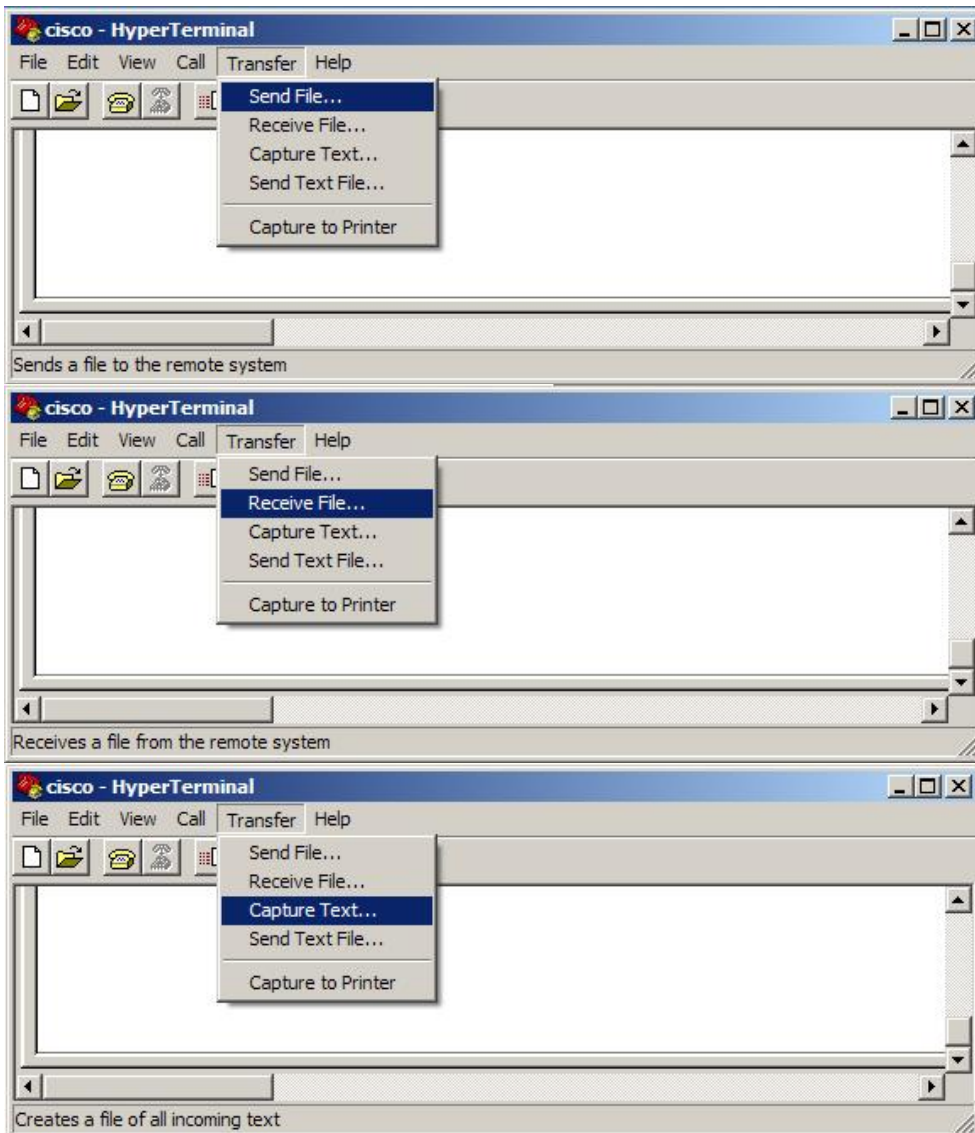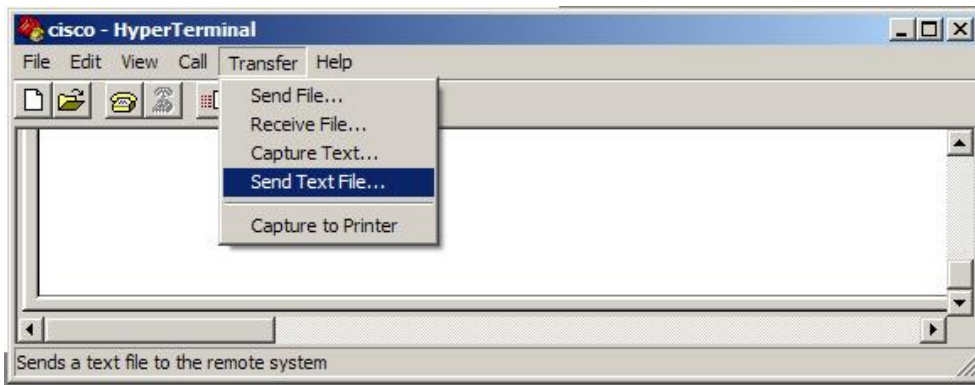
29. How many host addresses may be assigned when using the 128.107.0.0 network address with a subnet mask of 255.255.248.0?

30
256
2046
2048
4094
4096

30. Which application layer protocol allows administrators to log into a server from remote locations and control a server as though logged in locally?

DNS
FTP
DHCP
SMTP
Telnet

31. During the encapsulation process, what is the PDU of the internet layer?

bit
data
frame
packet
segment

32. Which service is used when the nslookup command is issued on a computer?

FTP
DNS
DHCP
Telnet

Network before subnetting:
192.168.2.0 255.255.255.0

Subnet mask to be used:
255.255.255.224

Host calculation:
$2^n - 2$

33. Refer to the exhibit. A network technician creates equal-sized subnets of network 192.168.2.0/24 using the subnet mask 255.255.255.224. If the technician wishes to calculate the number of host addresses in each subnet by using the formula that is shown in the exhibit, what value will be used for n?

1
2
3
4
5

34. What are the default terminal emulation software settings when configuring a Cisco device through a console port?

Bits per second: 19200
Data bits: 7
Parity: None
Stop bits: 0
Flow control: None

Bits per second: 9600
Data bits: 8
Parity: None
Stop bits: 1
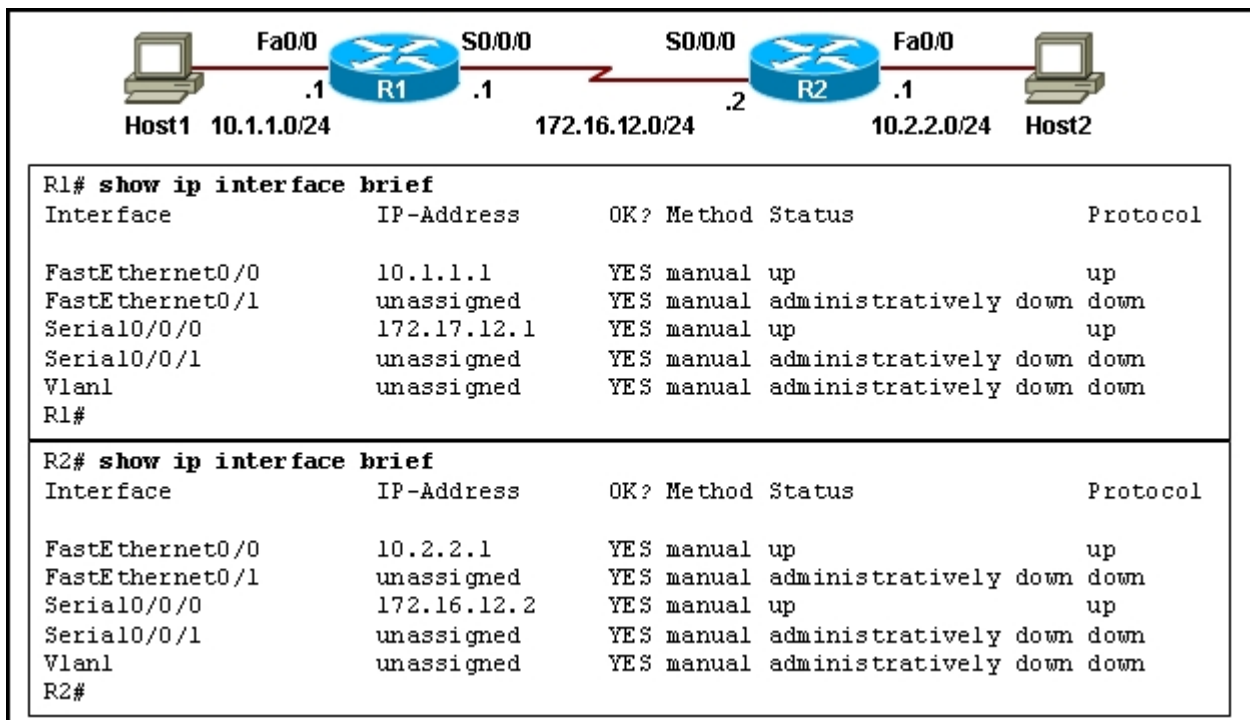**Flow control: None**

Bits per second: 19200
Data bits: 7
Parity: None
Stop bits: 0
Flow control: Hardware

Bits per second: 9600
Data bits: 8
Parity: None
Stop bits: 1
Flow control: Hardware

35. In a packet-switched data network, what is used to reassemble the packets in the correct order at the destination device?

source address
sequence number
priority assignment
destination address

```
R1# show ip interface brief
Interface          IP-Address     OK? Method Status                     Protocol

FastEthernet0/0    10.1.1.1       YES manual up                         up
FastEthernet0/1    unassigned     YES manual administratively down down
Serial0/0/0        172.17.12.1    YES manual up                         up
Serial0/0/1        unassigned     YES manual administratively down down
Vlan1              unassigned     YES manual administratively down down
R1#
```

```
R2# show ip interface brief
Interface          IP-Address     OK? Method Status                     Protocol

FastEthernet0/0    10.2.2.1       YES manual up                         up
FastEthernet0/1    unassigned     YES manual administratively down down
Serial0/0/0        172.16.12.2    YES manual up                         up
Serial0/0/1        unassigned     YES manual administratively down down
Vlan1              unassigned     YES manual administratively down down
R2#
```

36. Refer to the exhibit. A network administrator tries to test the connectivity between routers R1 and R2, but the attempt to ping is unsuccessful. Based on the show ip interface brief command outputs, what could be the possible cause of the problem?

Interface S0/0/0 on router R1 is shut down.
Interface S0/0/0 on router R1 is configured with an incorrect IP address.
Interface S0/0/0 on router R2 is administratively down.
Interface S0/0/0 on router R2 does not have the clock rate settings configured.

37. Which router configuration mode will require user authentication if an administrator issues the enable secret command?

user executive mode
privileged executive mode
global configuration mode
service specific configuration mode

38. Which location of router memory is cleared with the erase startup-config command?

flash
RAM
ROM
NVRAM

39. Which subnet mask should be used for a Class B network that is divided into subnets and will accommodate between 800 hosts and 1000 hosts?

255.255.255.0
255.255.254.0
255.255.252.0
255.255.248.0
255.255.240.0

40. Which two programs can be used to accomplish terminal emulation for configuring a router from the CLI through the console port? (Choose two.)

HyperTerminal
Internet Explorer
Minicom
Secure Shell
Telnet

```
B#show ip interface brief
Interface          IP-Address      OK? Method  Status                  Protocol
FastEthernet0/0    192.168.1.62    YES manual  up                      up

FastEthernet0/1    192.168.1.254   YES manual  administratively down   down

Serial0/0/0        192.168.1.2     YES manual  up                      up

Serial0/0/1        192.168.1.5     YES manual  up                      up

B#
```

41. Refer to the exhibit. The network containing router B is experiencing problems. A network associate has isolated the issue in this network to router B. What action can be preformed to correct the network issue?

issue the clock rate command on interface Serial 0/0/0
issue the description command on interface Serial 0/0/1
issue the ip address command on interface FastEthernet 0/0
issue the no shutdown command on interface FastEthernet 0/1
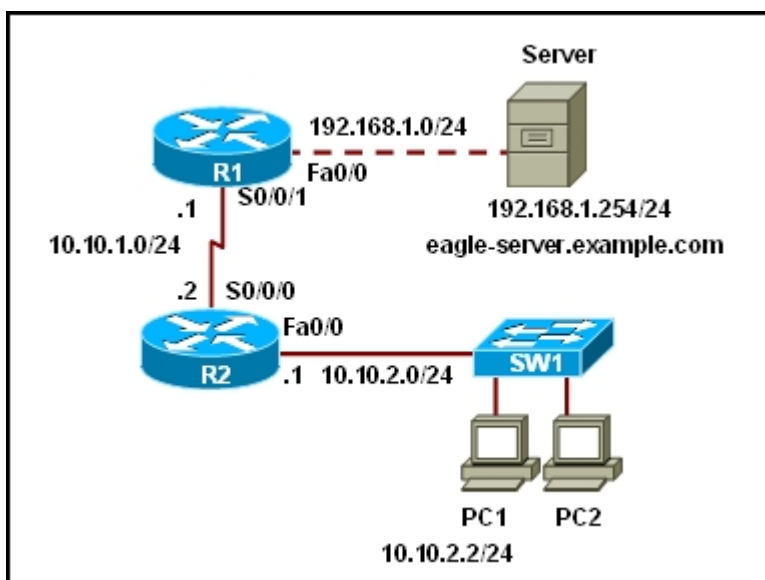
42. Refer to the exhibit. A web browser running on host PC1 sends a request for a web page to the web server with an IP address 192.168.1.254/24. What sequence of steps will follow in order to establish the session before data can be exchanged?

The session will be initiated using UDP. No additional acknowledgment will be required to establish the session.
The session will be initiated using TCP. No additional acknowledgment will be required to establish the session.

The session will be initiated using UDP. The returned web page will serve as an acknowledgment for session establishment.

The session will be initiated using TCP. A three-way handshake must be successfully completed before the session is established.

43. Which prompt is associated with the privileged exec mode?
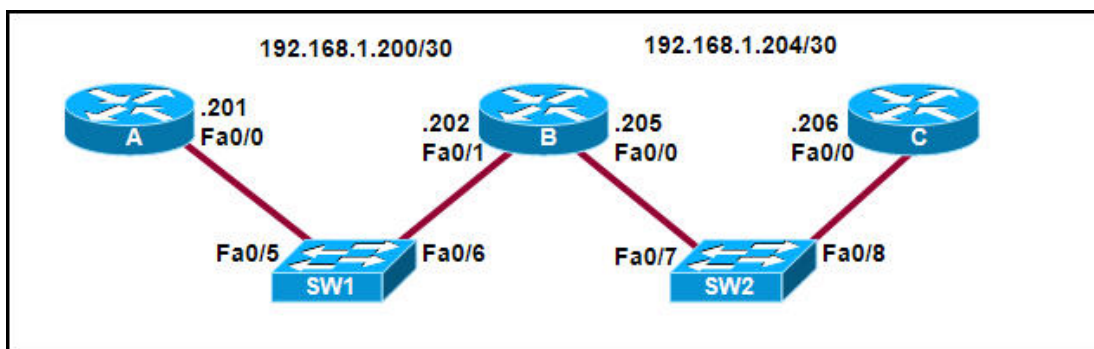
R1>

R1#

R1(config)#

R1(config-router)#

44. 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.

45. Refer to the exhibit. Interface Fa0/0 on router A is generating excessive broadcast traffic. Which LAN segments will affected by the excessive broadcasts?

Only the 192.168.1.200/30 network will be affected.

Only the link between 192.168.1.201 and port Fa0/5 on SW1 will be affected.

Both the 192.168.1.200/30 and 192.168.1.204/30 networks will be affected.

Only the links between 192.168.1.201 and port Fa0/7 on SW2 will be affected.

46. What is the effect of using the Router# copy running-config startup-config command on a router?
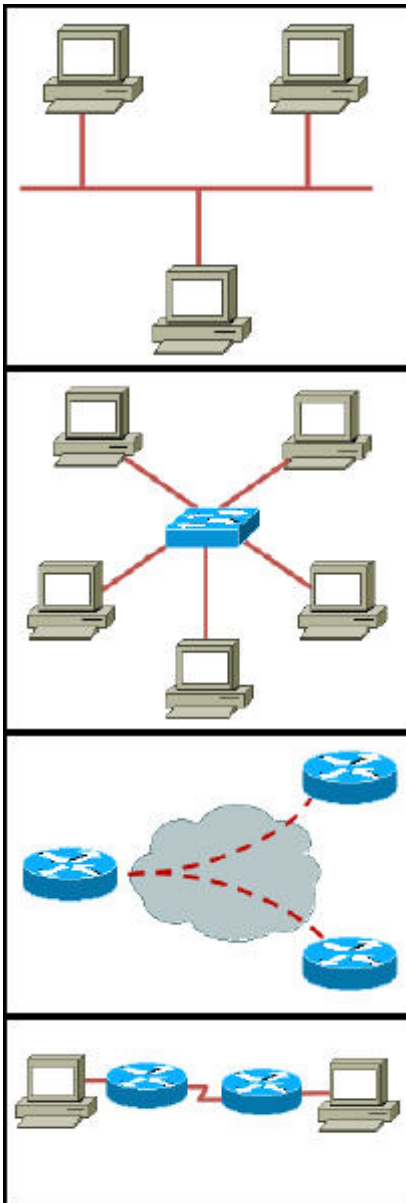
The contents of ROM will change.

The contents of RAM will change.

The contents of NVRAM will change.

The contents of flash will change.

47. Which option represents a point-to-point logical topology diagram?

The correct answer is last image.

48. 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

49. Which communication tool allows real-time collaboration?

wiki
e-mail
weblog
instant messaging