Cisco

Exam 200-125

CCNA Cisco Certified Network Associate CCNA (v3.0)

Version: 6.0

[Total Questions: 401]

Topic break down

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Topic 1, Network Fundamentals

Question No : 1 DRAG DROP - (Topic 1)

Refer to the exhibit. Complete this network diagram by dragging the correct device name or description to the correct location. Not all the names or descriptions will be used.

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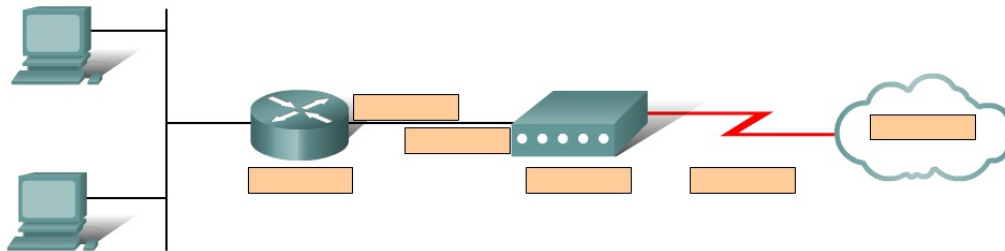
| Digital Line | CSU/DSU Synchronous | Analog Modem Asynchronous | WAN Service Provider Network | Router | Switch | DTE | DCE |

Answer:

Refer to the exhibit. Complete this network diagram by dragging the correct device name or description to the correct location. Not all the names or descriptions will be used.
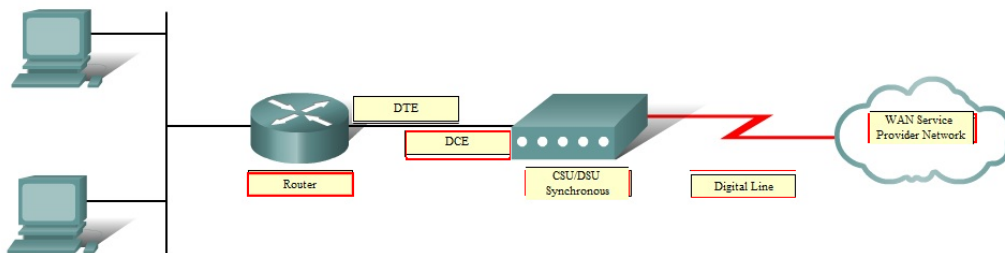
| Digital Line | CSU/DSU Synchronous | Analog Modem Asynchronous | WAN Service Provider Network | Router | Switch | DTE | DCE |

Question No : 2 - (Topic 1)

Refer to the exhibit.
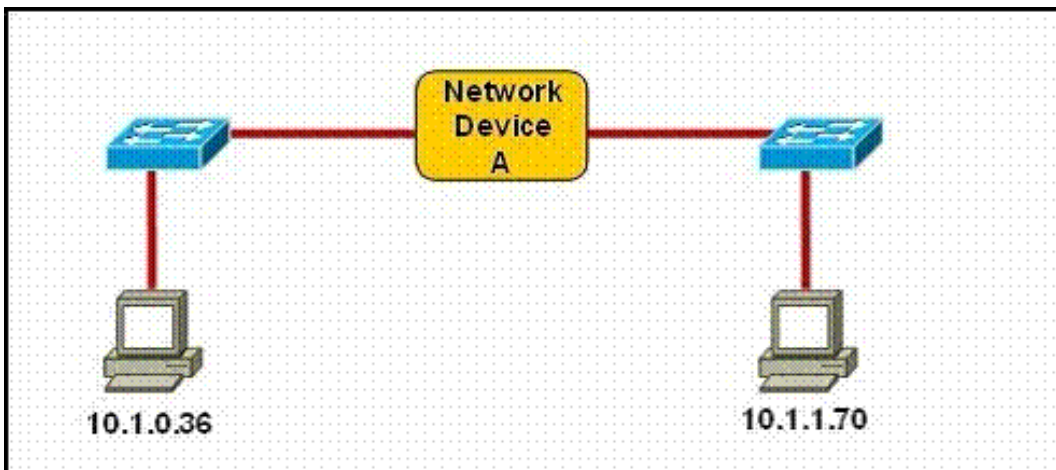
Which three statements correctly describe Network Device A? (Choose three.)

A. With a network wide mask of 255.255.255.128, each interface does not require an IP address.
B. With a network wide mask of 255.255.255.128, each interface does require an IP address on a unique IP subnet.
C. With a network wide mask of 255.255.255.0, must be a Layer 2 device for the PCs to communicate with each other.
D. With a network wide mask of 255.255.255.0, must be a Layer 3 device for the PCs to communicate with each other.
E. With a network wide mask of 255.255.254.0, each interface does not require an IP address.

Answer: B,D,E
Explanation:

If Subnet Mask is 255.255.255.128 the hosts vary from x.x.x.0 - x.x.x.127 & x.x.x.128-x.x.x.255, so the IP Addresses of 2 hosts fall in different subnets so each interface needs an IP an address so that they can communicate each other.

If Subnet Mask is 255.255.255.0 the 2 specified hosts fall in different subnets so they need a Layer 3 device to communicate.

If Subnet Mask is 255.255.254.0 the 2 specified hosts are in same subnet so are in network address and can be accommodated in same Layer 2 domain and can communicate with each other directly using the Layer 2 address.

Question No : 3 - (Topic 1)

Which layer in the OSI reference model is responsible for determining the availability of the receiving program and checking to see if enough resources exist for that communication?

A. transport
B. network
C. presentation
D. session
E. application

Answer: E

Explanation:

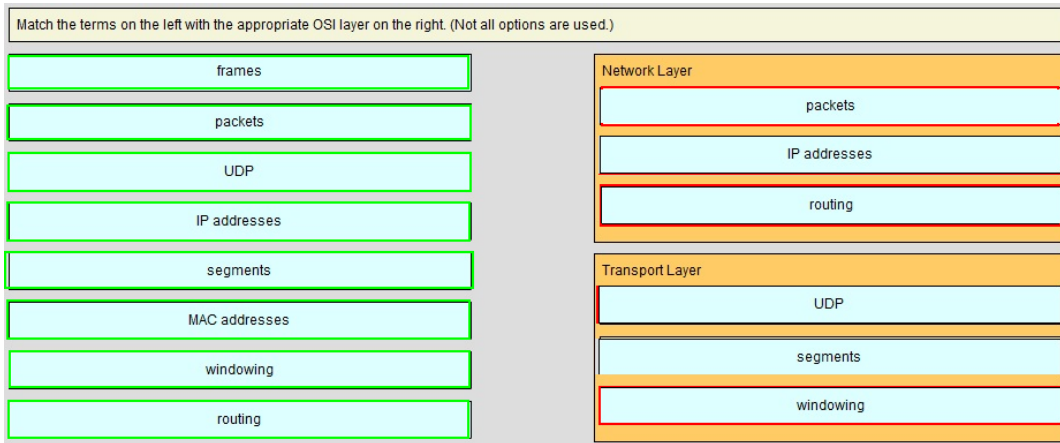This question is to examine the OSI reference model.
The Application layer is responsible for identifying and establishing the availability of the intended communication partner and determining whether sufficient resources for the intended communication exist.

Question No : 4 DRAG DROP - (Topic 1)

Match the terms on the left with the appropriate OSI layer on the right. (Not all options are used.)

Match the terms on the left with the appropriate OSI layer on the right. (Not all options are used.)

| frames |
| packets |
| UDP |
| IP addresses |
| segments |
| MAC addresses |
| windowing |
| routing |

Network Layer

Transport Layer

Answer:

Match the terms on the left with the appropriate OSI layer on the right. (Not all options are used.)

frames
packets
UDP
IP addresses
segments
MAC addresses
windowing
routing

Network Layer

packets
IP addresses
routing

Transport Layer

UDP
segments
windowing

Question No : 5 - (Topic 1)

A network administrator is verifying the configuration of a newly installed host by establishing an FTP connection to a remote server. What is the highest layer of the protocol stack that the network administrator is using for this operation?

A. application
B. presentation
C. session
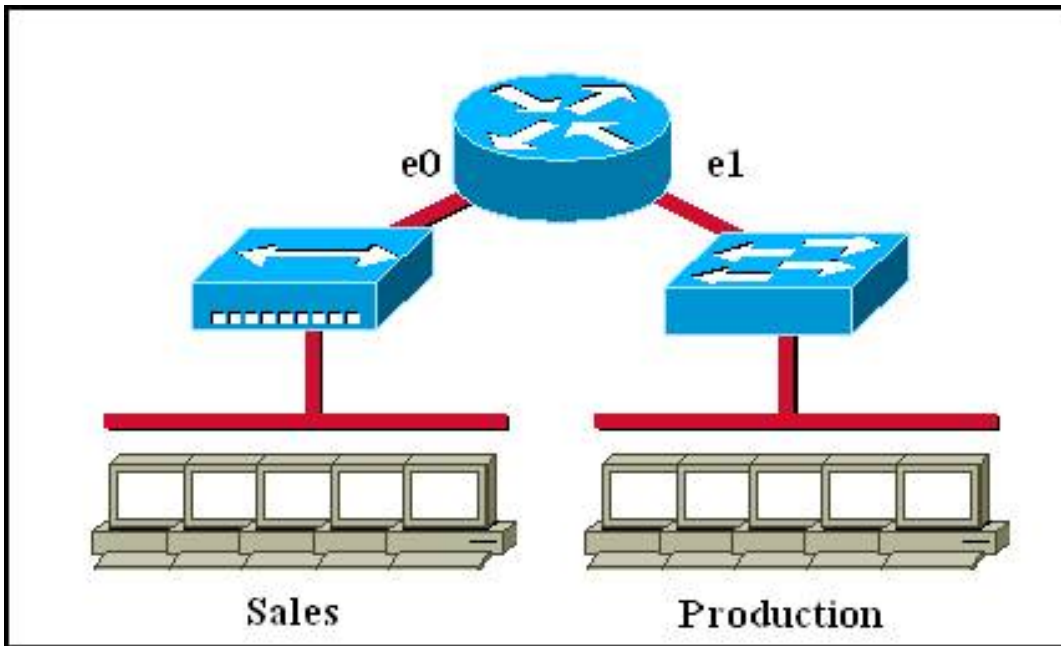**D.** transport
E. internet
F. data link

Answer: A

Explanation:

FTP belongs to Application layer and it is also the highest layer of the OSI model.

Question No : 6 - (Topic 1)

Which of the following statements describe the network shown in the graphic? (Choose two.)

A. There are two broadcast domains in the network.
B. There are four broadcast domains in the network.
C. There are six broadcast domains in the network.
D. There are four collision domains in the network.
E. There are five collision domains in the network.
F. There are seven collision domains in the network.
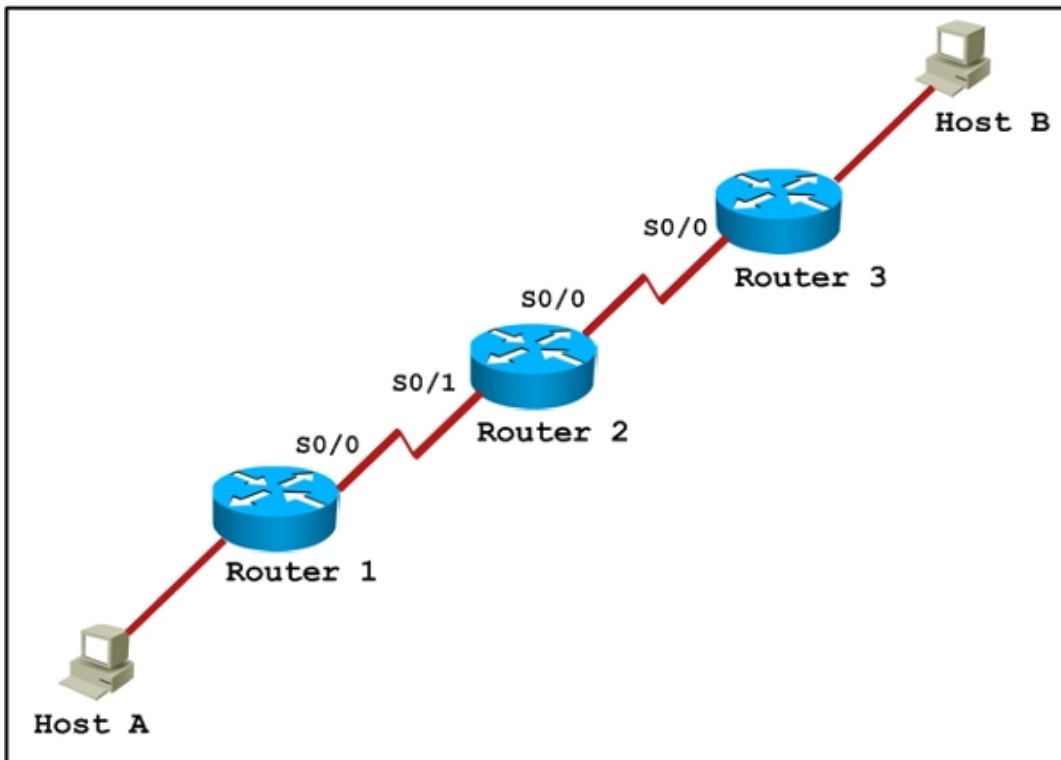
Answer: A,F

Explanation:

Only router can break up broadcast domains so in the exhibit there are 2 broadcast domains: from e0 interface to the left is a broadcast domain and from e1 interface to the right is another broadcast domain ->.

Both router and switch can break up collision domains so there is only 1 collision domain on the left of the router (because hub doesn't break up collision domain) and there are 6 collision domains on the right of the router (1 collision domain from e1 interface to the switch + 5 collision domains for 5 PCs in Production) ->.

Question No : 7 - (Topic 1)

Refer to the exhibit.

Host A pings interface S0/0 on router 3. What is the TTL value for that ping?

**A.** 252
B. 253
C. 254
D. 255

Answer: B
Explanation:

From the CCNA ICND2 Exam book: "Routers decrement the TTL by 1 every time they forward a packet; if a router decrements the TTL to 0, it throws away the packet. This prevents packets from rotating forever." I want to make it clear that before the router forwards a packet, the TTL is still remain the same. For example in the topology above, pings to S0/1 and S0/0 of Router 2 have the same TTL.
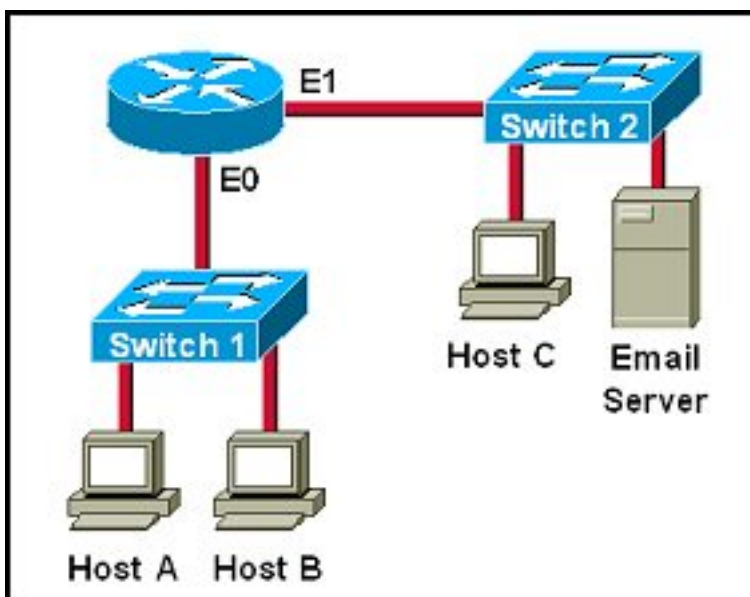The picture below shows TTL values for each interface of each router and for Host B. Notice that Host A initializes ICMP packet with a TTL of 255:
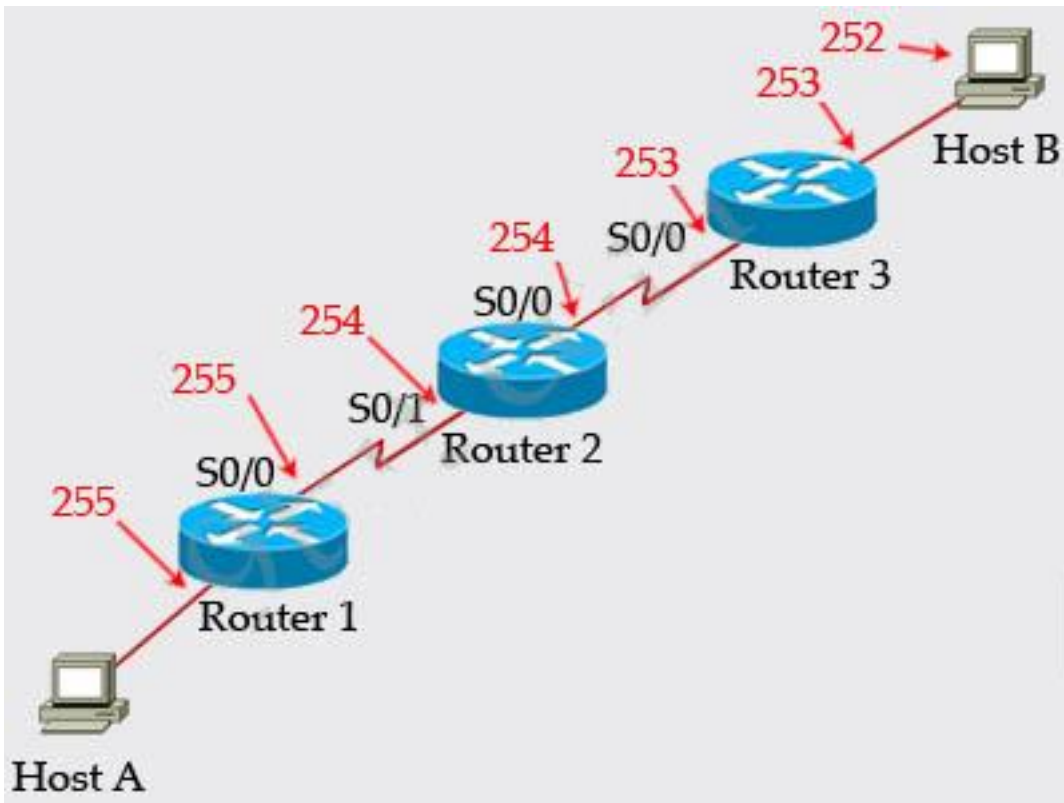
Question No : 8 - (Topic 1)

Refer to exhibit:

Which two destination addresses will be used by Host A to send data to Host C? (Choose two.)

A. the IP address of Switch 1
B. the MAC address of Switch 1
C. the IP address of Host C
D. the MAC address of Host C
E. the IP address of the router's E0 interface
F. the MAC address of the router's E0 interface

Answer: C,F

Explanation:

While transferring data through many different networks, the source and destination IP addresses are not changed. Only the source and destination MAC addresses are changed. So in this case Host A will use the IP address of Host C and the MAC address of E0 interface to send data. When the router receives this data, it replaces the source MAC address with its own E1 interface's MAC address and replaces the destination MAC address with Host C's MAC address before sending to Host C.

Question No : 9 - (Topic 1)

Which of the following describes the roles of devices in a WAN? (Choose three.)

A. A CSU/DSU terminates a digital local loop.
B. A modem terminates a digital local loop.
C. A CSU/DSU terminates an analog local loop.
D. A modem terminates an analog local loop.
E. A router is commonly considered a DTE device.
F. A router is commonly considered a DCE device.

Answer: A,D,E

Explanation:

The idea behind a WAN is to be able to connect two DTE networks together through a DCE network. The network's DCE device (includes CSU/DSU) provides clocking to the DTE-connected interface (the router's serial interface).