200-101 Q&As

Interconnecting Cisco Networking Devices Part 2 (ICND2)

Pass Cisco 200-101 Exam with 100% Guarantee

Free Download Real Questions & Answers **PDF** and **VCE** file from:

https://www.passapply.com/200-101.html

100% Passing Guarantee
100% Money Back Assurance

Following Questions and Answers are all new published by Cisco Official Exam Center

QUESTION 1

Which statement describes the process ID that is used to run OSPF on a router?

A. It is globally significant and is used to represent the AS number.

B. It is locally significant and is used to identify an instance of the OSPF database.

C. It is globally significant and is used to identify OSPF stub areas.

D. It is locally significant and must be the same throughout an area.

Correct Answer: B

QUESTION 2

Which protocol is an open standard protocol framework that is commonly used in VPNs, to provide secure end-to-end communications?

A. RSA

B. L2TP

C. IPsec

D. PPTP

Correct Answer: C

Internet Protocol Security (IPsec) is a technology protocol suite for securing Internet Protocol (IP) communications by authenticating and/or encrypting each IP packet of a communication session. IPsec also includes protocols for establishing mutual authentication between agents at the beginning of the session and negotiation of cryptographic keys to be used during the session.

QUESTION 3

Which three statements about HSRP operation are true? (Choose three.)

A. The virtual IP address and virtual MA+K44C address are active on the HSRP Master router.

B. The HSRP default timers are a 3 second hello interval and a 10 second dead interval.

C. HSRP supports only clear-text authentication.

D. The HSRP virtual IP address must be on a different subnet than the routers\\' interfaces on the same LAN.

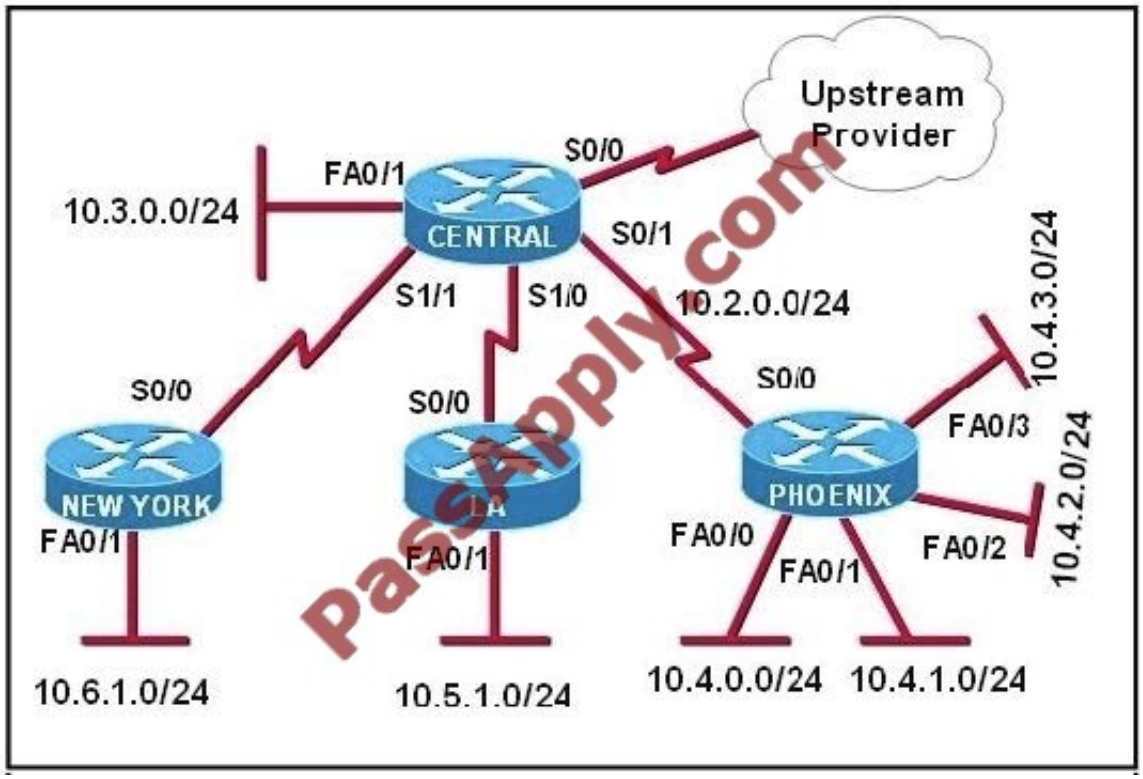
E. The HSRP virtual IP address must be the same as one of the router\\'s interface addresses on the LAN.

F. HSRP supports up to 255 groups per interface, enabling an administrative form of load balancing.

Correct Answer: ABF

QUESTION 4

Refer to the exhibit.



The Lakeside Company has the internetwork in the exhibit. The administrator would like to reduce the size of the routing table on the Central router. Which partial routing table entry in the Central router represents a route summary that represents the LANs in Phoenix but no additional subnets?

A. 10.0.0.0/22 is subnetted, 1 subnets D 10.0.0.0 [90/20514560] via 10.2.0.2, 6w0d, Serial0/1

B. 10.0.0.0/28 is subnetted, 1 subnets D 10.2.0.0 [90/20514560] via 10.2.0.2, 6w0d, Serial0/1

C. 10.0.0.0/30 is subnetted, 1 subnets D 10.2.2.0 [90/20514560] via 10.2.0.2, 6w0d, Serial0/1

D. 10.0.0.0/22 is subnetted, 1 subnets D 10.4.0.0 [90/20514560] via 10.2.0.2, 6w0d, Serial0/1

E. 10.0.0.0/28 is subnetted, 1 subnets D 10.4.4.0 [90/20514560] via 10.2.0.2, 6w0d, Serial0/1

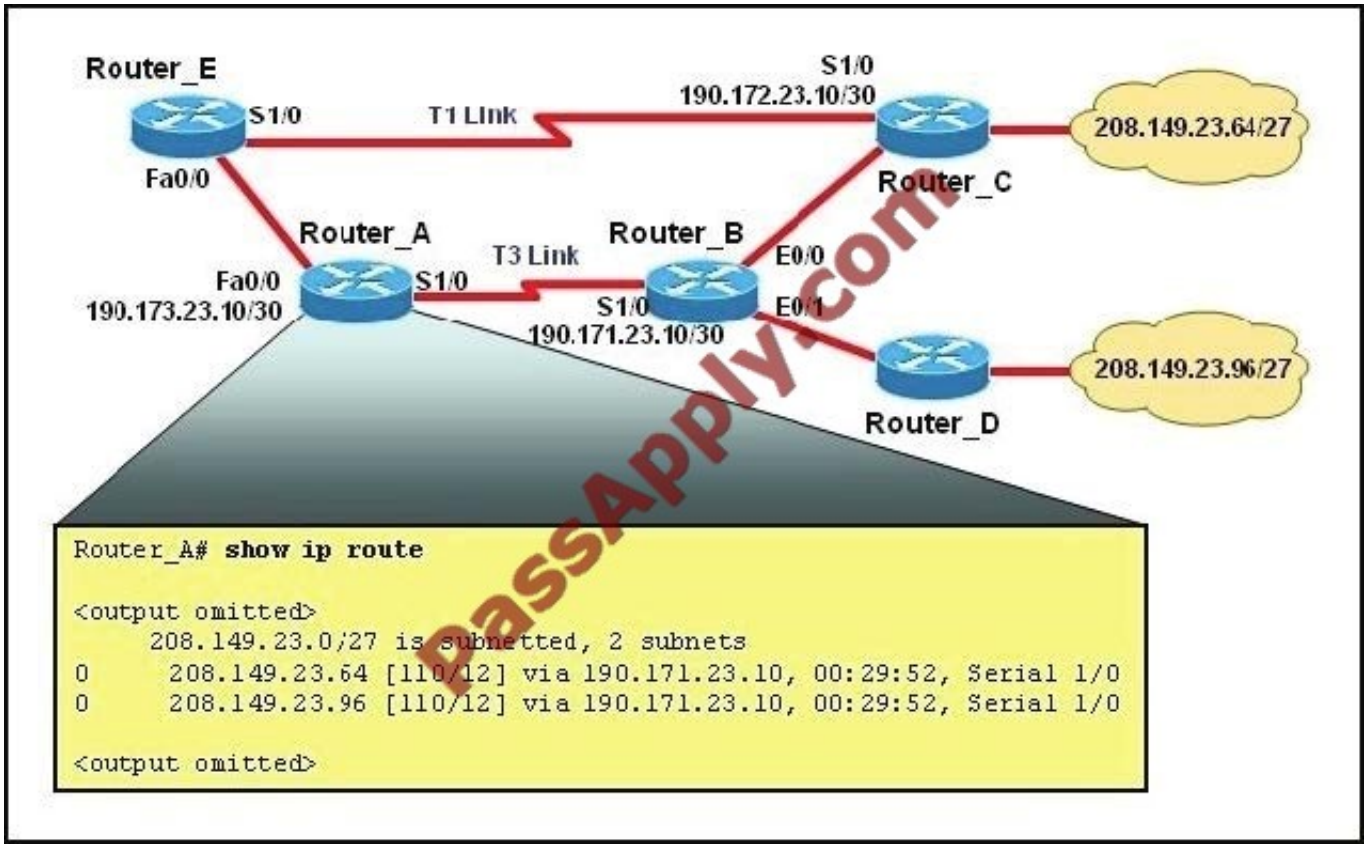
F. 10.0.0.0/30 is subnetted, 1 subnets D 10.4.4.4 [90/20514560] via 10.2.0.2, 6w0d, Serial0/1

Correct Answer: D

All the above networks can be summarized to 10.0.0.0 network but the question requires to "represent the LANs in Phoenix but no additional subnets" so we must summarized to 10.4.0.0 network. The Phoenix router has 4 subnets so we need to "move left" 2 bits of "/24-> /22 is the best choice - D is correct.

QUESTION 5

Refer to the exhibit.



The network is converged. After link-state advertisements are received from Router_A, what information will Router_E contain in its routing table for the subnets 208.149.23.64 and 208.149.23.96?

A. O 208.149.23.64 [110/13] via 190.173.23.10, 00:00:07, FastEthernet 0/0 O 208.149.23.96 [110/13] via 190.173.23.10, 00:00:16, FastEthernet 0/0

B. O 208.149.23.64 [110/1] via 190.172.23.10, 00:00:07, Serial 1/0 O 208.149.23.96 [110/3] via 190.173.23.10, 00:00:16, FastEthernet 0/0

C. O 208.149.23.64 [110/13] via 190.172.23.10, 00:00:07, Serial 1/0 O 208.149.23.96 [110/13] via 190.172.23.10, 00:00:16, Serial 1/0 O 208.149.23.96 [110/13] via 190.173.23.10, 00:00:16, FastEthernet 0/0

D. O 208.149.23.64 [110/3] via 190.172.23.10, 00:00:07, Serial 1/0 O 208.149.23.96 [110/3] via 190.172.23.10, 00:00:16, Serial 1/0

Correct Answer: A

Router_E learns two subnets subnets 208.149.23.64 and 208.149.23.96 via Router_A through FastEthernet interface. The interface cost is calculated with the formula 108 / Bandwidth. For FastEthernet it is 108 / 100 Mbps = 108 / 100,000,000 = 1. Therefore the cost is 12 (learned from Router_A) + 1 = 13 for both subnets - B is not correct. The cost through T1 link is much higher than through T3 link (T1 cost = 108 / 1.544 Mbps = 64; T3 cost = 108 / 45 Mbps = 2) so surely OSPF will choose the path through T3 link -> Router_E will choose the path from Router_A through FastEthernet0/0, not Serial1/0 - C and D are not correct. In fact, we can quickly eliminate answers B, C and D because

they contain at least one subnet learned from Serial1/0 - they are surely incorrect.

QUESTION 6

Which command allows you to verify the encapsulation type (CISCO or IETF) for a Frame Relay link?

A. show frame-relay lmi

B. show frame-relay map

C. show frame-relay pvc

D. show interfaces serial

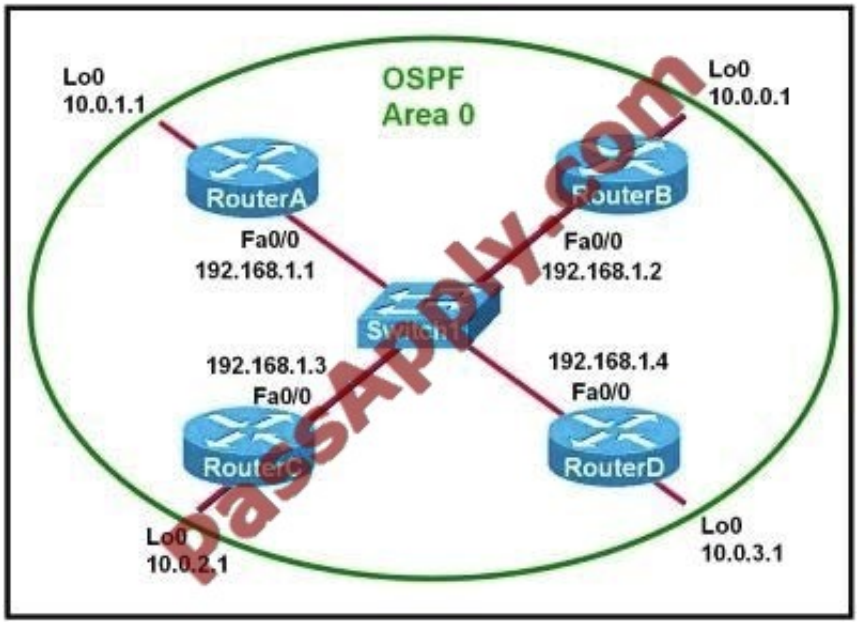
Correct Answer: B

map will show frame relay encapsulation (cisco or ietf)
http://www.cisco.com/en/US/docs/ios/12_2/wan/command/reference/wrffr4.html#wp1029343 "show frame-relay map" will show frame relay encapsulation type (CISCO or IETF)

Field	Description
Serial 1 (administratively down)	Identifies a Frame Relay interface and its status (up or down).
ip 131.108.177.177	Destination IP address.
dlci 177 (0xB1,0x2C10)	DLCI that identifies the logical connection being used to reach this interface. This value is displayed in three ways: its decimal value (177), its hexadecimal value (0xB1), and its value as it would appear on the wire (0x2C10).
static	Indicates whether this is a static or dynamic entry.
CISCO	Indicates the encapsulation type for this map; either CISCO or IETF.
TCP/IP Header Compression (inherited), passive (inherited)	Indicates whether the TCP/IP header compression characteristics were inherited from the interface or were explicitly configured for the IP map.

QUESTION 7

Refer to the exhibit.



Which two statements are true about the loopback address that is configured on RouterB? (Choose two.)

A. It ensures that data will be forwarded by RouterB.

B. It provides stability for the OSPF process on RouterB.

C. It specifies that the router ID for RouterB should be 10.0.0.1.

D. It decreases the metric for routes that are advertised from RouterB.

E. It indicates that RouterB should be elected the DR for the LAN.

Correct Answer: BC

A loopback interface never comes down even if the link is broken so it provides stability for the OSPF process (for example we use that loopback interface as the router-id) - B is correct.

The router-ID is chosen in the order below:

The highest IP address assigned to a loopback (logical) interface. If a loopback interface is not defined, the highest IP address of all active router\\'s physical interfaces will be chosen.

-The loopback interface will be chosen as the router ID of RouterB - C is correct.

QUESTION 8

The network administrator has been asked to give reasons for moving from IPv4 to IPv6. What are two valid reasons for adopting IPv6 over IPv4? (Choose two.)

A. no broadcast

B. change of source address in the IPv6 header

C. change of destination address in the IPv6 header

D. Telnet access does not require a password

E. autoconfig

F. NAT

Correct Answer: AE

Six Benefits Of IPv6 http://www.networkcomputing.com/ipv6/six-benefits-of-ipv6/230500009

With IPv6, everything from appliances to automobiles can be interconnected. But an increased number of IT addresses isn\\'t the only advantage of IPv6 over IPv4. In honor of World IPv6 Day, here are six more good reasons to make sure your hardware, software, and services support IPv6. More Efficient Routing IPv6 reduces the size of routing tables and makes routing more efficient and hierarchical. IPv6 allows ISPs to aggregate the prefixes of their customers\\' networks into a single prefix and announce this one prefix to the IPv6 Internet. In addition, in IPv6 networks, fragmentation is handled by the source device, rather than the router, using a protocol for discovery of the path\\'s maximum transmission unit (MTU).

More Efficient Packet Processing IPv6\\'s simplified packet header makes packet processing more efficient. Compared with IPv4, IPv6 contains no IP-level checksum, so the checksum does not need to be recalculated at every router hop. Getting rid of the IPlevel checksum was possible because most link-layer technologies already contain checksum and error-control capabilities. In addition, most transport layers, which handle end-to-end connectivity, have a checksum that enables error detection. Directed Data Flows IPv6 supports multicast rather than broadcast. Multicast allows bandwidth-intensive packet flows (like multimedia streams) to be sent to multiple destinations simultaneously, saving network bandwidth. Disinterested hosts no longer must process broadcast packets. In addition, the IPv6 header has a new field, named Flow Label, that can identify packets belonging to the same flow. Simplified Network Configuration Address auto-configuration (address assignment) is built in to IPv6. A router will send the prefix of the local link in its router advertisements. A host can generate its own IP address by appending its link-layer (MAC) address, converted into Extended Universal Identifier (EUI) 64-bit format, to the 64 bits of the local link prefix.

Support For New Services By eliminating Network Address Translation (NAT), true end-to-end connectivity at the IP layer is restored, enabling new and valuable services. Peer-to-peer networks are easier to create and maintain, and services such as VoIP and Quality of Service (QoS) become more robust. Security IPSec, which provides confidentiality, authentication and data integrity, is baked into in IPv6. Because of their potential to carry malware, IPv4 ICMP packets are often blocked by corporate firewalls, but ICMPv6, the implementation of the Internet Control Message Protocol for IPv6, may be permitted because IPSec can be applied to the ICMPv6 packets.

QUESTION 9

It has become necessary to configure an existing serial interface to accept a second Frame Relay virtual circuit. Which of the following are required to solve this? (Choose three)

A. configure static frame relay map entries for each subinterface network.

B. remove the ip address from the physical interface

C. create the virtual interfaces with the interface command

D. configure each subinterface with its own IP address

E. disable split horizon to prevent routing loops between the subinterface networks

F. encapsulate the physical interface with multipoint PPP

Correct Answer: BCD

How To Configure Frame Relay Subinterfaces http://www.orbit-computer-solutions.com/How-To-Configure-Frame-Relay-Subinterfaces.php

Step to configure Frame Relay subinterfaces on a physical interface:

1.

Remove any network layer address (IP) assigned to the physical interface. If the physical interface has an address, frames are not received by the local subinterfaces.

2.

Configure Frame Relay encapsulation on the physical interface using the encapsulation frame- relay command.

3.

For each of the defined PVCs, create a logical subinterface. Specify the port number, followed by a period (.) and the subinterface number. To make troubleshooting easier, it is suggested that the subinterface number matches the DLCI number.

4.

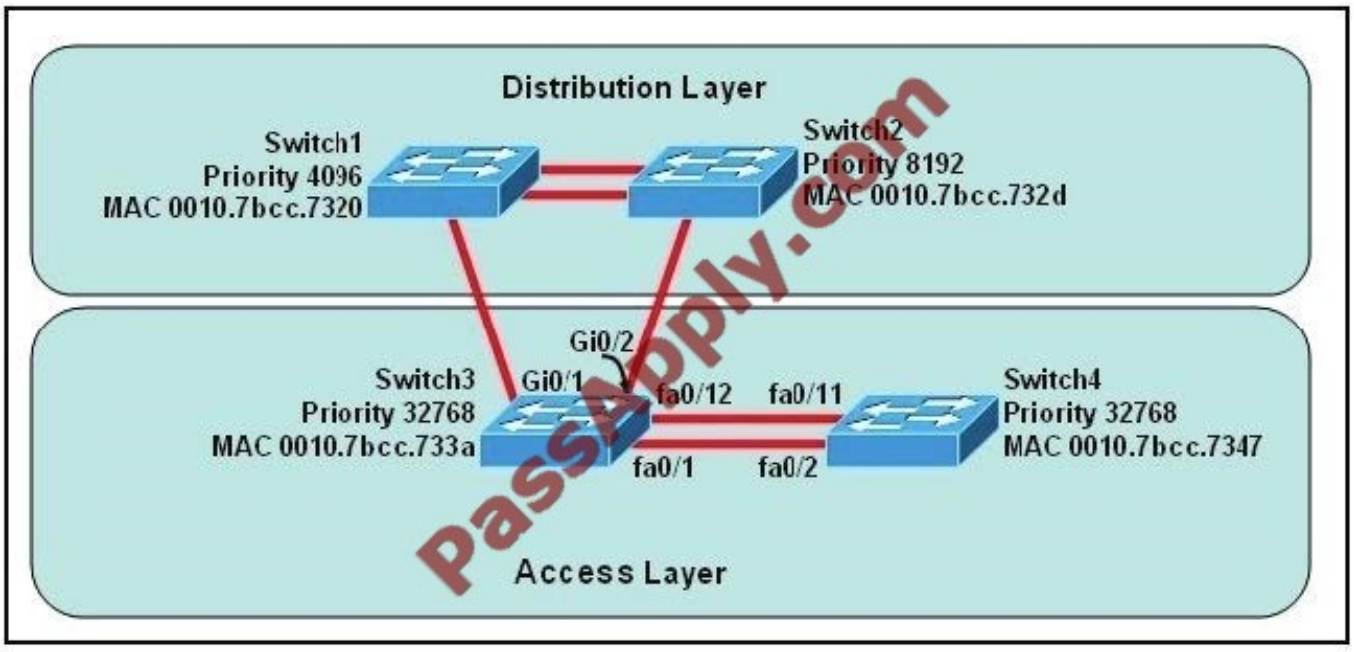
Configure an IP address for the interface and set the bandwidth.

5.

Configure the local DLCI on the subinterface using the frame-relay interface-dlci command. Configuration Example: R1>enable R1#configure terminal R1(config)#interface serial 0/0/0 R1(config-if)#no ip address R1(config-if)#encapsulation frame-relay R1(config-if)#no shutdown R1(config-if)#exit R1(config-subif)#interface serial 0/0/0.102 point-to-point R1(config-subif)#ip address 192.168.1.245 255.255.255.252 R1(config-subif)#frame-relay interface-dlci R1(config-subif)#end R1#copy running-config startup-config

QUESTION 10

Refer to the exhibit.



At the end of an RSTP election process, which access layer switch port will assume the discarding role?

A. Switch3, port fa0/1

B. Switch3, port fa0/12

C. Switch4, port fa0/11

D. Switch4, port fa0/2

E. Switch3, port Gi0/1

F. Switch3, port Gi0/2

Correct Answer: C

In this question, we only care about the Access Layer switches (Switch3 and 4). Switch 3 has a lower bridge ID than Switch 4 (because the MAC of Switch3 is smaller than that of Switch4) so both ports of Switch3 will be in forwarding state. The alternative port will surely belong to Switch4. Switch4 will need to block one of its ports to avoid a bridging loop between the two switches. But how does Switch4 select its blocked port? Well, the answer is based on the BPDUs it receives from Switch3. A BPDU is superior than another if it has:

1.

A lower Root Bridge ID

2.

A lower path cost to the Root

3.

A lower Sending Bridge ID

4.

A lower Sending Port ID

These four parameters are examined in order. In this specific case, all the BPDUs sent by Switch3 have the same Root Bridge ID, the same path cost to the Root and the same Sending Bridge ID. The only parameter left to select the best one is the Sending Port ID (Port ID = port priority + port index). In this case the port priorities are equal because they use the default value, so Switch4 will compare port index values, which are unique to each port on the switch, and because Fa0/12 is inferior to Fa0/1, Switch4 will select the port connected with Fa0/1 (of Switch3) as its root port and block the other port -> Port fa0/11 of Switch4 will be blocked (discarding role)

QUESTION 11

What is the default administrative distance of OSPF?

A. 90

B. 100

C. 110

D. 120

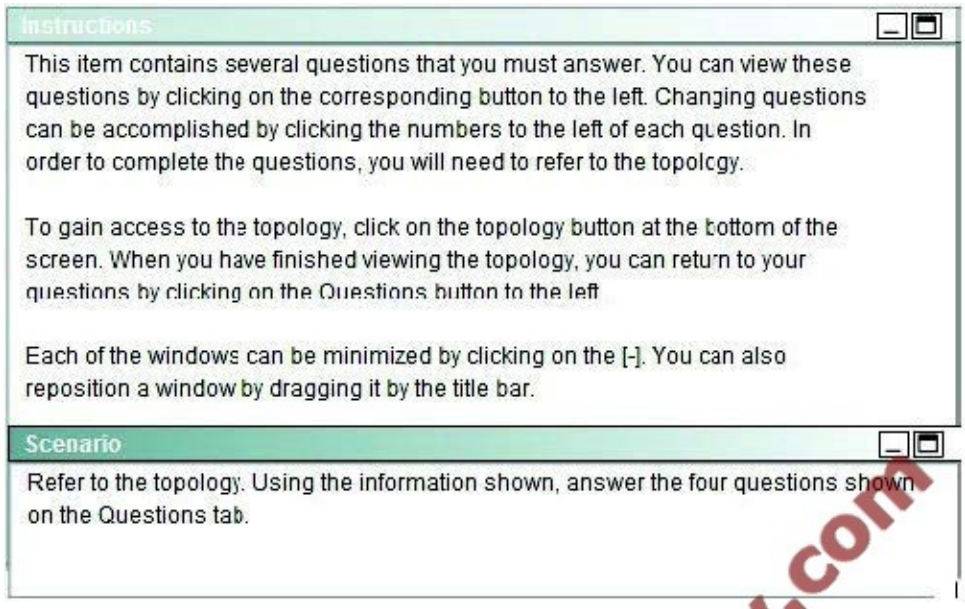
Correct Answer: C

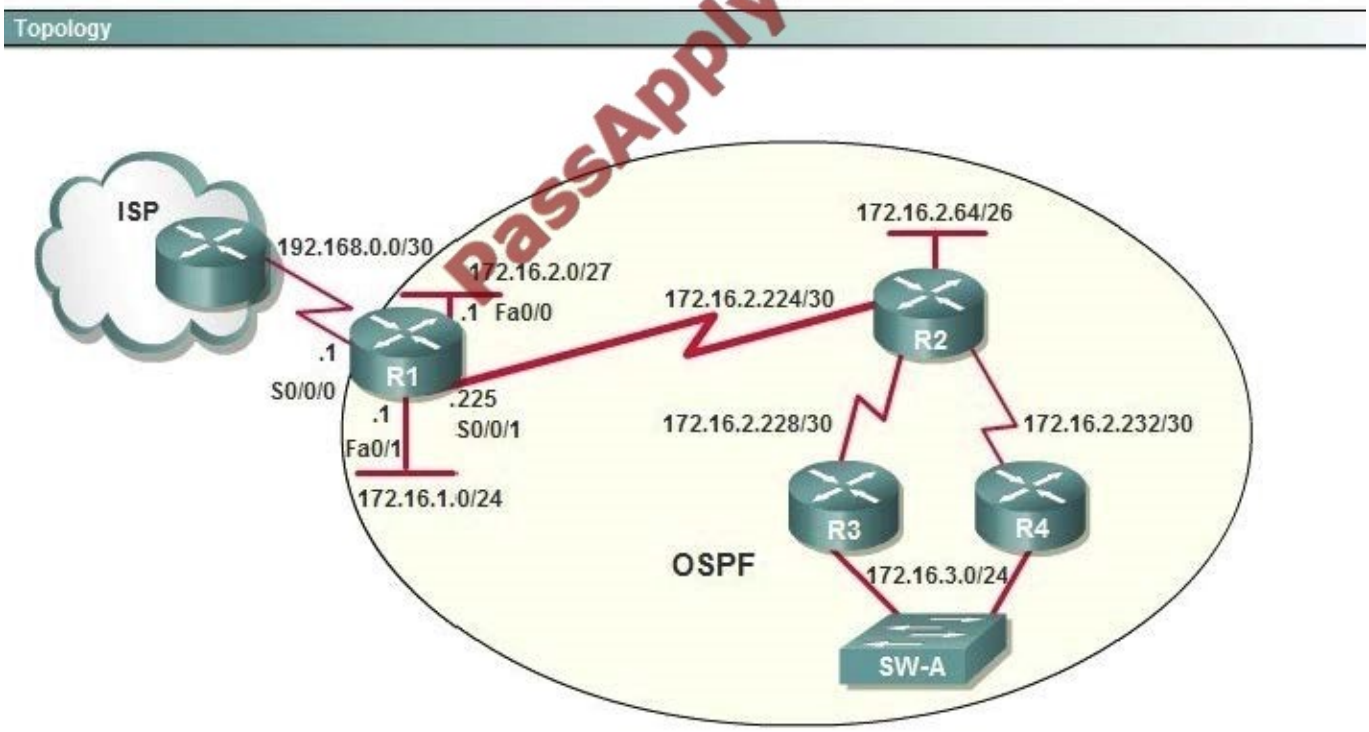
Default Distance Value Table

This table lists the administrative distance default values of the protocols that Cisco supports:

Route Source	Default Distance Values
Connected interface	0
Static route	1
Enhanced Interior Gateway Routing Protocol (EIGRP) summary route	5
External Border Gateway Protocol (BGP)	20
Internal EIGRP	90
IGRP	100
OSPF	110
Intermediate System-to-Intermediate System (IS-IS)	115
Routing Information Protocol (RIP)	120
Exterior Gateway Protocol (EGP)	140
On Demand Routing (ODR)	160
External EIGRP	170
Internal BGP	200
Unknown*	255

QUESTION 12





OSPF is configured using default classful addressing. With all routers and interfaces operational, how many networks will be in the routing table of R1 that are indicated to be learned by OSPF?

A. 2

B. 3

C. 4

D. 5

E. 6

F. 7

Correct Answer: C

It already knows about its directly connected ones, only those not directly connected are "Learned by OSPF". OSPF as a link state routing protocol (deals with LSAs rather than routes) does not auto summarize (doesn\\'t support "autosummary").So learned route by OSPF are followed 172.16.2.64/26 172.16.2.228/30 172.16.2.232/30