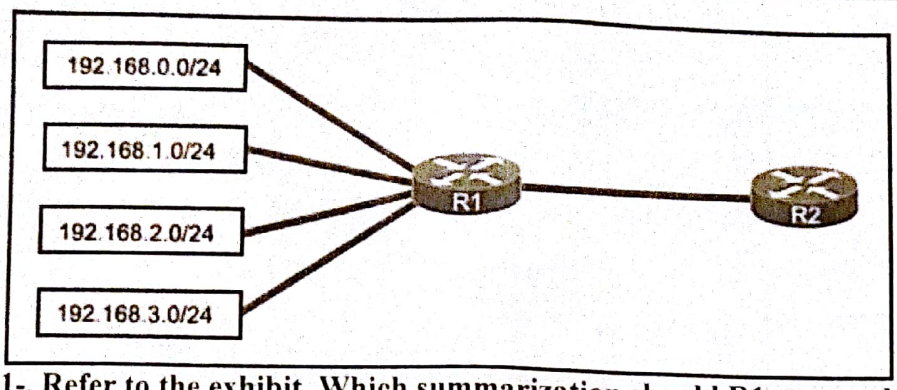


الاجابة النموذجية

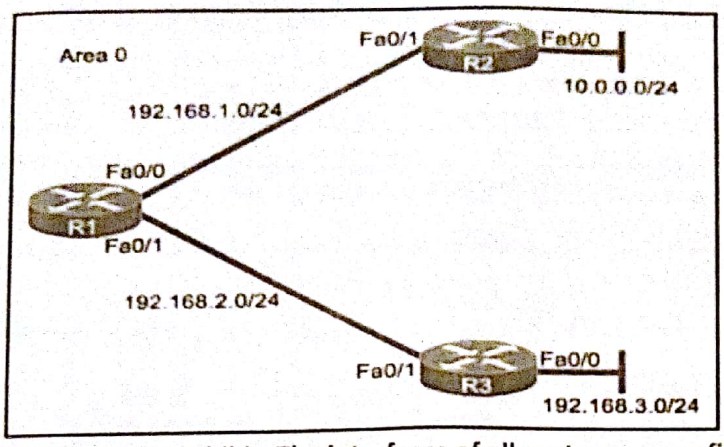
1-. Refer to the exhibit. Which summarization should R1 use to advertise its networks to R2?

192.168.1.0/24
192.168.0.0/24
192.168.0.0/22 ✓
192.168.1.0/22

```
R2# show ip eigrp topology
IP-EIGRP Topology Table for AS(80)/ID(192.168.101.1)

Codes: P - Passive, A - Active, U - Update, Q - Query, R - Reply,
       r - reply Status, s - sia Status

P 192.168.1.0/30, 1 successors, FD is 128256
       Via Connected, Serial0/0/0
R2#


R1# show ip eigrp topology
IP-EIGRP Topology Table for AS(50)/ID(192.168.100.5)

Codes: P -
Passive, A - Active, U - Update, Q - Query, R - Reply,
       r - reply Status, s - sia Status

P 192.168.1.0/30, 1 successors, FD is 20512000
        via Connected, Serial0/0/0
```

2. Refer to the exhibit. Routers R1 and R2 are directly connected via their serial interfaces and are both running the EIGRP routing protocol. R1 and R2 can ping the directly connected serial interface of their neighbor, but they cannot form an EIGRP neighbor adjacency.
What action should be taken to solve this problem?

Enable the serial interfaces of both routers.
Configure EIGRP to send periodic updates.
Configure the same hello interval between the routers.
Configure both routers with the same EIGRP process ID. ✓



3. Refer to the exhibit. The interfaces of all routers are configured for OSPF area 0. R3 can ping R1, but the two routers are unable to establish a neighbor adjacency. What should the network administrator do to troubleshoot this problem?

Check if the interfaces of the routers are enabled.

Check the hello and dead intervals between the routers.

Check the process ID of both routers.

Check if CDP is enabled on all the routers.

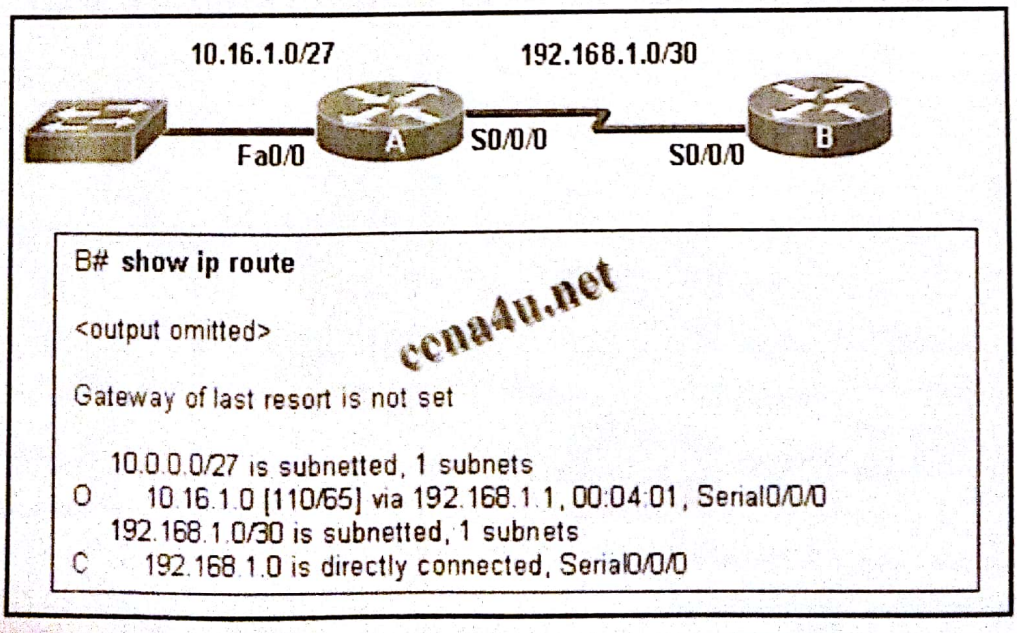
4-.What is one advantage of using multiarea OSPF?

It improves the routing efficiency by reducing the routing table and link-state update overhead.

It enables multiple routing protocols to be running in a large network.

It increases the routing performance by dividing the neighbor table into separate smaller ones.

It allows OSPFv2 and OSPFv3 to be running together.



5-Refer to the exhibit. Router A is correctly configured for OSPF. Which OSPF configuration statement or set of statements was entered for router B to generate the exhibited routing table?

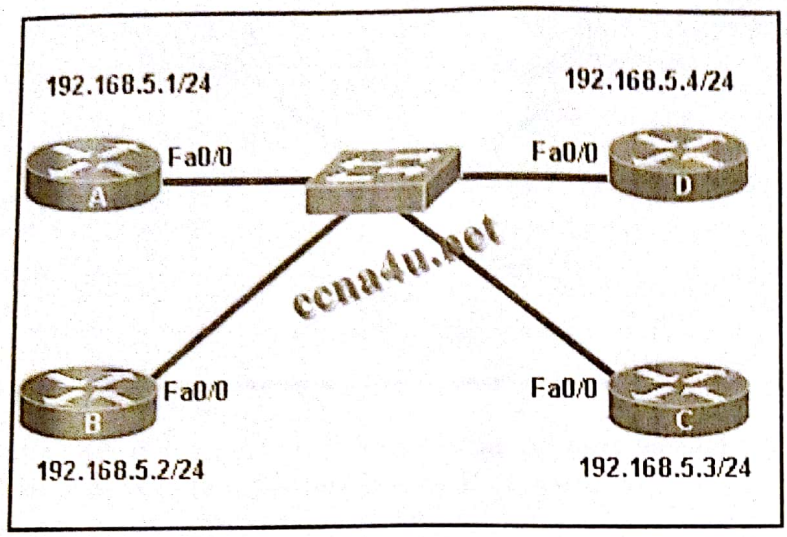
B(config-router)# **network 192.168.1.0 0.0.0.3 area 0**

B(config-router)# **network 10.16.1.0 0.0.0.224 area 0**

B(config-router)# **network 10.16.1.0 255.255.255.224 area 0**

B(config-router)# **network 192.168.1.0 255.255.255.255 area 0**

B(config-router)# **network 10.0.0.0 255.255.255.255 area 0**



6-Refer to the exhibit. Routers A, B, C, and D are all running OSPF with default router IDs and OSPF interface priorities. Loopback interfaces are not configured and all interfaces are operational. Router D is the DR and router C is the BDR. What happens immediately after the following commands are entered on router A?

A(config)# **interface fa0/0**

A(config-if)# **ip ospf priority 255**

A will become the DR. D will become the BDR.

A will become the DR. C will remain the BDR.

D will remain the DR. A will become the BDR.

D will remain the DR. C will remain the BDR.

7-A network administrator is verifying a multi-area OSPF configuration by checking the routing table on a router in area 1. The administrator notices a route to a network that is connected to a router in area 2. Which code appears in front of this route in the routing table within area 1?

O IA

O

C

O E2

8. What range of networks will be advertised in the OSPF updates by the command Router1(config-router)# network 192.168.0.0 0.0.15.255 area 100?

192.168.0.0/24 through 192.168.0.15/24

192.168.0.0/24 through 192.168.15.0/24

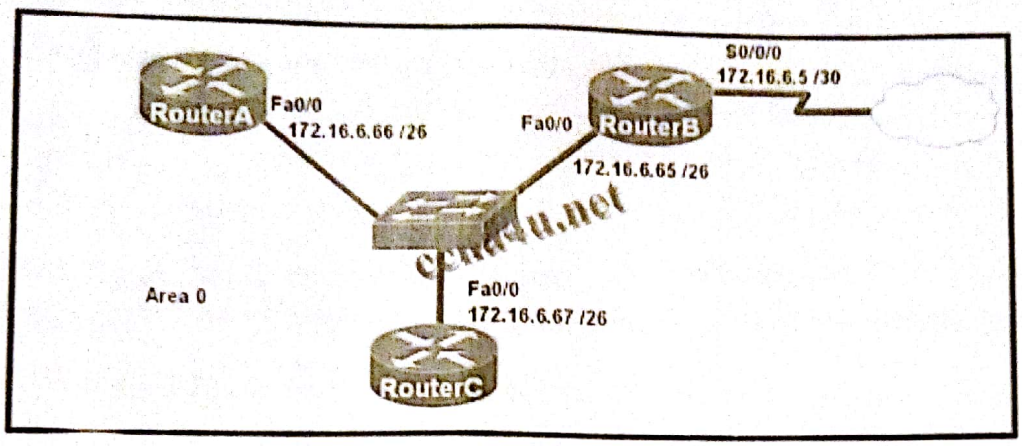
192.168.15.0/24 through 192.168.31.0/24

192.168.15.0/24 through 192.168.255.0/24

192.168.16.0/24 through 192.168.255.0/24

9. What is the default administrative distance for EIGRP external route?

90
100
110
170
200



10-Refer to the exhibit. Which command sequence on RouterB will redistribute a gateway of last resort to the other routers in OSPF area 0?

RouterB(config)# **router ospf 10**
RouterB(config-router)# **gateway-of-last-resort 172.16.6.6**
RouterB(config)# **ip route 0.0.0.0 0.0.0.0 serial 0/0/0**

RouterB(config)# **ip route 0.0.0.0 0.0.0.0 172.16.6.6**
RouterB(config)# **router ospf 10**
RouterB(config-router)# **default-information originate**

RouterB(config)# **router ospf 10**
RouterB(config-router)# **default-network 172.16.6.6 0.0.0.3 area 0**
RouterB(config)# **ip route 0.0.0.0 0.0.0.0 172.16.6.6**

RouterB(config)# **ip default-route 0.0.0.0 0.0.0.0 172.16.6.6**
RouterB(config)# **router ospf 10**
RouterB(config-router)# **redistribute ip default-route**

11-

```
A# show running-config
router ospf 2
 log-adjacency-changes
 network 192.168.1.0 0.0.0.3 area 0
 network 192.168.1.4 0.0.0.3 area 0
```

Refer to the exhibit. What does the "2" stand for in the router ospf 2 statement?

The number 2 is the autonomous system number.
The number 2 indicates the number of networks advertised by OSPF.
The number 2 identifies this particular instance of OSPF on this router.
The number 2 indicates the priority of the OSPF process on this router.

```
ORL# show ip route
<output omitted>
     10.0.0.0/24 is subnetted, 1 subnets
O       10.0.0.0 [110/1786] via 192.168.1.1, 00:00:02, Serial0/0/0
C    192.168.1.0/24 is directly connected, Serial0/0/0
C    192.168.2.0/24 is directly connected, FastEthernet0/0
```

12-Refer to the exhibit. What is the cost of the route to the 10.0.0.0 network?

2

110

1786 ✓

1.544

13-Fill in the blank. Do not use acronyms.

OSPF type 1 LSA messages are generated by the " all routers " router to advertise routes in networks.

14-Which STP priority configuration would ensure that a switch would always be the root switch?

spanning-tree vlan 10 root primary ✓

spanning-tree vlan 10 priority 4096

spanning-tree vlan 10 priority 0

spanning-tree vlan 10 priority 61440

15-Fill in the blank. Use a number.

An ASBR generates type " 5 " LSAs for each of its external routes and floods them into the area that it is connected to.

.

16-When checking a routing table, a network technician notices the following entry:

O*E2 0.0.0.0/0 [110/1] via 192.168.16.3, 00:20:22, Serial0/0/0

What information can be gathered from this output?

This route is a propagated default route. ✓

The edge of the OSPF area 0 is the interface that is addressed 192.168.16.3.

The route is located two hops away.

The metric for this route is 110.

17-Which command will a network engineer issue to verify the configured hello and dead timer intervals on a point-to-point WAN link between two routers that are running OSPFv2?

show ipv6 ospf interface serial 0/0/0

show ip ospf neighbor

show ip ospf interface serial 0/0/0 ✓

show ip ospf interface fastethernet 0/1

18-Which statement describes a multiarea OSPF network?

It has a core backbone area with other areas connected to the backbone area. ✓

It has multiple routers that run multiple routing protocols simultaneously, and each protocol consists of an area.

It consists of multiple network areas that are daisy-chained together.

It requires a three-layer hierarchical network design approach.

19-Which command is used to verify that OSPF is enabled and also provides a list of the networks that are being advertised by the network?

show ip protocols ✓

show ip ospf interface

show ip interface brief

show ip route ospf

20-A network engineer suspects that OSPFv3 routers are not forming neighbor adjacencies because there are interface timer mismatches. Which two commands can be issued on the interface of each OSFPv3 router to resolve all timer mismatches? (Choose two.)

no ipv6 ospf dead-interval ✓

no ipv6 router ospf 10

ip ospf dead-interval 40

no ipv6 ospf hello-interval ✓

no ipv6 ospf cost 10

ip ospf hello-interval 1

21-During verification or troubleshooting of the OPSFv3 configuration on a router, which three parameters are displayed by the show ipv6 ospf interface command? (Choose three.)

the hello and dead intervals ✓

the metric of the route that is attached to the interface

the global unicast IPv6 address of the interface

the number of interfaces in the area

the OSPFv3 area that the interface is in

the process ID that is assigned to the interface

22-. Where can interarea route summarization be performed in an OSPF network?

ABR

any router

DR

ASBR

23-A network engineer is reviewing a network design that uses a fixed configuration enterprise router that supports both LAN and WAN connections. However, the engineer realizes that the router does not have enough interfaces to support growth and network expansion. Which type of device should be used as a replacement?

a PoE device

another fixed configuration router

a modular router

a Layer 3 switch

24-As the network administrator you have been asked to implement EtherChannel on the corporate network. What does this configuration consist of?

grouping multiple physical ports to increase bandwidth between two switches

providing redundant links that dynamically block or forward traffic

grouping two devices to share a virtual IP address

providing redundant devices to allow traffic to flow in the event of device failure

25- Which two statements correctly describe OSPF type 3 LSAs? (Choose two.)

Type 3 LSAs are used to update routes between OSPF areas.

Type 3 LSAs are known as router link entries.

Type 3 LSAs are used for routes to networks outside the OSPF autonomous system.

Type 3 LSAs are known as autonomous system external LSA entries.

Type 3 LSAs are generated without requiring a full SPF calculation.