

**Exam Code: JN0-363**

**Exam name: Service Provider Routing and Switching, Specialist (JNCIS-SP)**



## Exam A

### QUESTION 1

What is a key differentiator of generate routes from aggregate routes?

- A. Generate routes use a forwarding next hop.
- B. Generate routes have a default next-hop value of reject.
- C. Generate routes have a default preference value of 210.
- D. Generate routes cannot be used as a gateway of last resort.

**Correct Answer: A**

**Section:**

**Explanation:**

<https://www.networkfuntimes.com/junos-aggregate-routes-vs-generate-routes-how-to-summarise-on-juniper-routers/>

### QUESTION 2

Which statement is correct about the FE80::/10 prefix?

- A. This prefix range is used for the link local address.
- B. This prefix range is used on the loopback interface.
- C. This prefix range is reserved for multicast applications.
- D. This prefix range is not reserved.

**Correct Answer: A**

**Section:**

### QUESTION 3

You want to share routes between two routing instances that you have configured?

What are two ways to accomplish this task? (Choose two.)

- A. Use a non-forwarding instance.
- B. Configure an instance import policy.
- C. Create a forwarding instance.
- D. Use a RIB group.

**Correct Answer: B, D**

**Section:**

**Explanation:**

static route with a next-hop of next-table pointing to the appropriate routing table which contains more accurate information rib-groups to mirror routing information from one route-table to another. However, in many cases, in order to make this work, interface-routes also need to be mirrored. RIB Group policy can be used to constrain the routing information instance-import and instance-export statements configured within the individual routing-instances to leak routes from one table to another. Again, policy can be used here to constrain the routing information. This method is more straightforward than the rib-group method. A final approach is to use physical interfaces or logical-tunnels to stitch routing-instances and use a routing protocol or static routes across this connection between the two routing-instances.

### QUESTION 4

You are implementing traffic engineering in your MPLS network. You must ensure that the MPLS routes are used to traverse your network. Your solution should not affect IGP routes in your route tables.



In this scenario, which traffic engineering setting will accomplish this behavior?

- A. bgp-igp-both-ribs
- B. mpls-forwarding
- C. bgp-igp
- D. bgp

**Correct Answer: D**

**Section:**

**Explanation:**

bgp---On BGP destinations only. Ingress routes are installed in the inet.3 routing table.

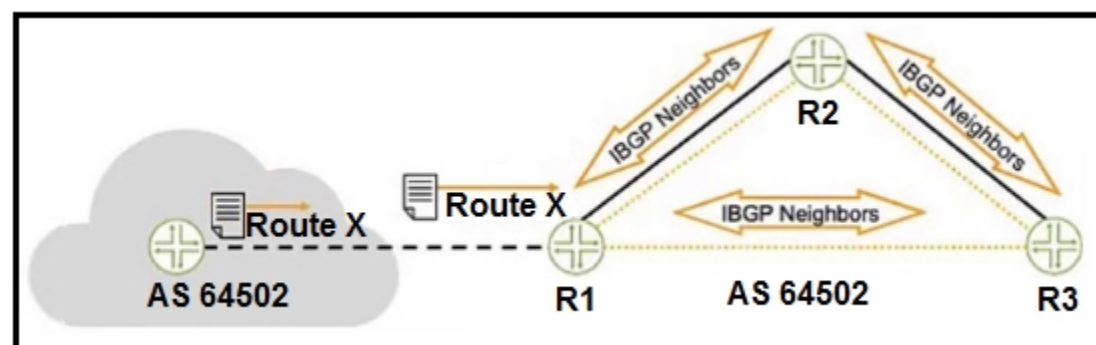
bgp-igp---On both BGP and IGP destinations. Ingress routes are installed in the inet.0 routing table. If IGP shortcuts are enabled, the shortcut routes are automatically installed in the inet.0 routing table.

bgp-igp-both-ribs---On both BGP and IGP destinations. Ingress routes are installed in the inet.0 and inet.3 routing tables. This option is used to support VPNs.

mpls-forwarding---On both BGP and IGP destinations. Use ingress routes for forwarding only, not for routing.

#### QUESTION 5

Click the Exhibit button.



Vdumps

Referring to the exhibit, from which device(s) does R3 learn about Route X?

- A. both R2 and R1
- B. R1 only
- C. directly from the router in AS 64502
- D. R2 only

**Correct Answer: B**

**Section:**

**Explanation:**

R2 can not forward IBGP learned routes to another IBGP neighbor correct

#### QUESTION 6

You are bringing a new network online with three IS-IS routers using default Junos election priorities. The routers are configured as Level 2 only IS-IS routers. Which statement is true about the DIS election in this scenario?

- A. The router with the highest MAC address will be elected as the DIS.
- B. The router with the highest numerical lo0 IP address will be elected as the DIS.
- C. The router with the lowest numerical lo0 IP address will be elected as the DIS.
- D. The router with the lowest MAC address will be elected as the DIS.

**Correct Answer: A**

**Section:**

**Explanation:**

A router's priority for becoming the designated router is indicated by an arbitrary number from 0 through 127, which you configure on the IS-IS interface. The router with the highest priority becomes the designated router for the area (Level 1, Level 2, or both), also configured on the IS-IS interface. If routers in the network have the same priority, then the router with the highest MAC address is elected as the designated router. By default, routers have a priority value of 64.

<https://www.juniper.net/documentation/us/en/software/junos/is-is/topics/concept/routing-protocol-is-is-security-designated-router-understanding.html>

**QUESTION 7**

You are deploying link aggregation groups.

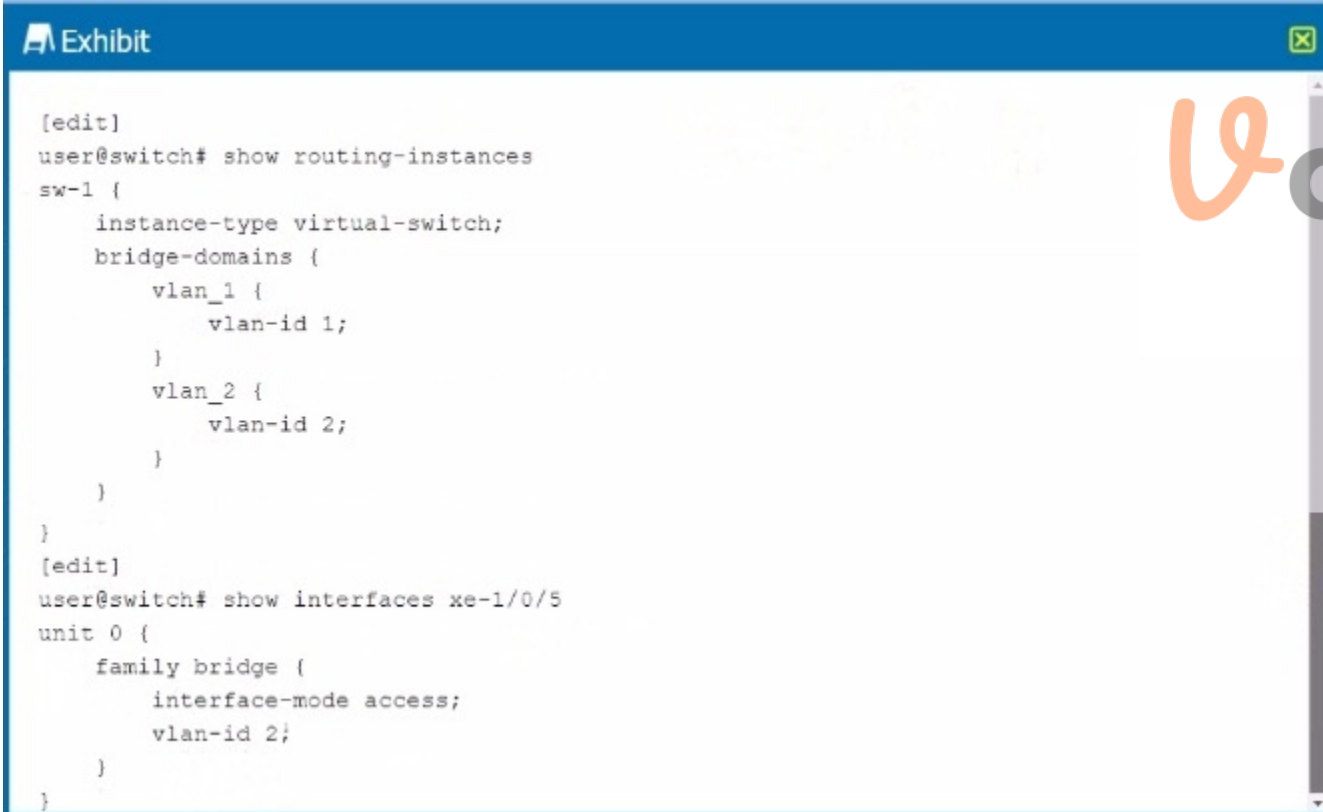
- A. By default, what are two considerations in this scenario? (Choose two.)
- B. There should only be four member links per LAG.
- C. All the ports must have the same speed.
- D. Member links are required to be contiguous ports.
- E. Member links can reside on different members within an MC-LAG.

**Correct Answer: B, D**

**Section:**

**QUESTION 8**

Exhibit



```
[edit]
user@switch# show routing-instances
sw-1 {
  instance-type virtual-switch;
  bridge-domains {
    vlan_1 {
      vlan-id 1;
    }
    vlan_2 {
      vlan-id 2;
    }
  }
}
[edit]
user@switch# show interfaces xe-1/0/5
unit 0 {
  family bridge {
    interface-mode access;
    vlan-id 2;
  }
}
```

You are asked to assign interface xe-1/0/5 to a virtual switch. What must be accomplished to complete the configuration?

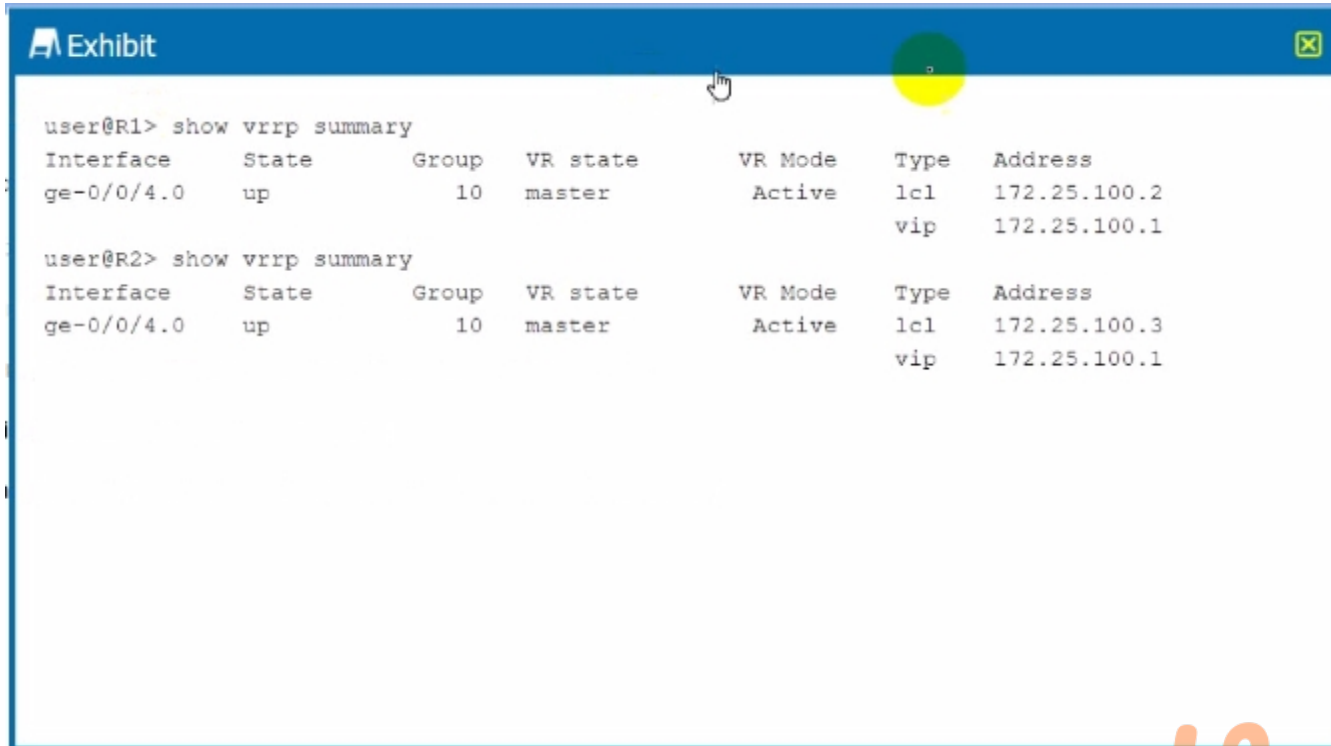
- A. Interface xe-1/0/5 must be added to routing-instance sw-1 vlan\_2.
- B. Interface xe-1/0/5 must be a trunk port.
- C. Interface xe-1/0/5 must be added to routing-instance sw-1.
- D. An IRB interface must be configured to routing-instance sw-1 vlan\_2.

**Correct Answer: C**

**Section:**

**QUESTION 9**

Exhibit



```
user@R1> show vrrp summary
Interface    State    Group  VR state    VR Mode    Type    Address
ge-0/0/4.0   up       10     master     Active     lcl     172.25.100.2
              vip     172.25.100.1

user@R2> show vrrp summary
Interface    State    Group  VR state    VR Mode    Type    Address
ge-0/0/4.0   up       10     master     Active     lcl     172.25.100.3
              vip     172.25.100.1
```

Referring to the exhibit, which statement is true about VRRP?

- A. VRRP communication between the two devices is not functioning correctly.
- B. Both routers are in the same state because they have the same VRRP priority.
- C. VRRP is functioning normally in active/active mode.
- D. The routers should use different virtual IP addresses for VRRP to function correctly.

**Correct Answer: D**

**Section:**

**QUESTION 10**

Exhibit

```
Exhibit
user@switch> show spanning-tree bridge
STP bridge parameters
Context ID                : 0
Enabled protocol          : RSTP
Root ID                   : 8192.50:c5:8d:ae:db:41
Hello time                : 10 seconds
Maximum age               : 40 seconds
Forward delay             : 30 seconds
Message age               : 0
Number of topology changes : 6
Time since last topology change : 781 seconds
Topology change initiator : ge-0/0/14.0
Topology change last recvd. from : 2c:6b:f5:31:06:0b
Local parameters
  Bridge ID                : 8192.50:c5:8d:ae:db:41
  Extended system ID       : 0
  Internal instance ID     : 0
```

Which two statements are correct about the information shown in the exhibit? (Choose two.)

- A. The root bridge is reachable using the ge-0/0/14 interface.
- B. This switch is the root bridge for this spanning tree topology.
- C. This switch has a bridge priority of 8k.
- D. The root bridge's priority is 4k.

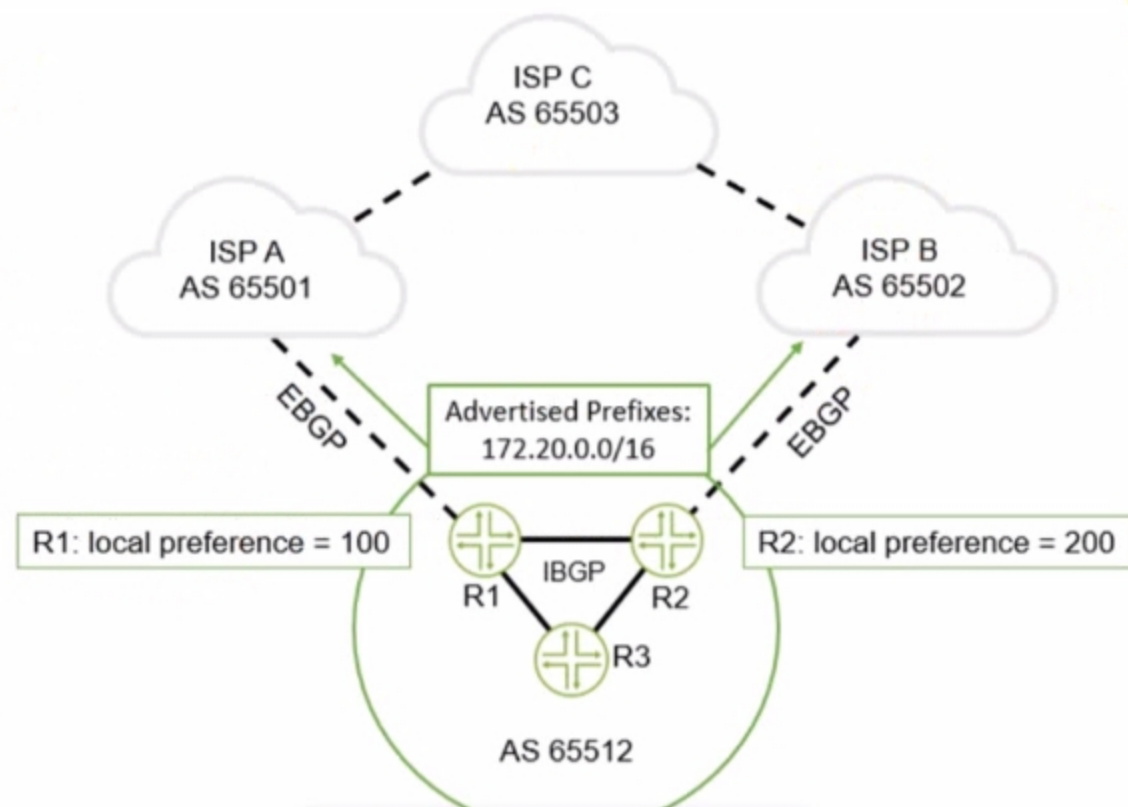
**Correct Answer: A, C**

**Section:**

**QUESTION 11**

Exhibit





You are advertising a summary route that represents your local network (172.20.0.0/16) to both ISP A and ISPB. You want to influence all traffic sent to you from ISP C to go through R2. How would you accomplish this task?

- A. On R1, prepend your AS number three times on the 172.20.0.0/16 route when advertising it to ISP 1.
- B. On R1, change the local preference value to 250.
- C. On R2, prepend your AS number three times on the 172.20.0.0/16 route when advertising it to ISP 2.
- D. On R2, change the local preference value to 50.

**Correct Answer: B**

**Section:**

#### QUESTION 12

Which two statements are correct about the community BGP attribute on a Junos device? (Choose two.)

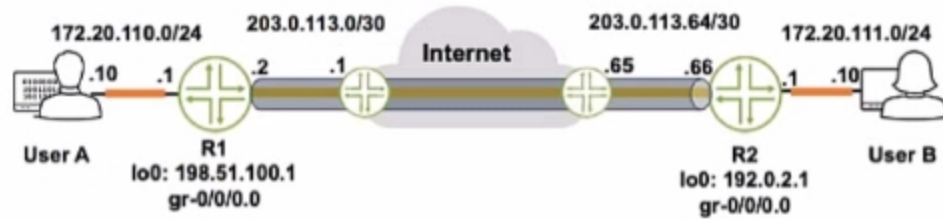
- A. The community attribute is a mandatory BGP attribute.
- B. If the community attribute is present, it is ignored and deleted in the BGP updates.
- C. If the community attribute is present, it should be passed unchanged in the BGP updates.
- D. The community attribute is an optional BGP attribute.

**Correct Answer: A, C**

**Section:**

#### QUESTION 13

Exhibit



Referring to the exhibit, how do you verify the status of the tunnel from R1?

- A. Issue the ping 172.20.111.10 source 172.20.110.1 command.
- B. Issue the ping 172.20.111.10 source 198.51.100.1 command.
- C. Issue the ping 172.20.iii.io source 203.0.113.2 command.
- D. Issue the ping 172.20. III. 10 command.

**Correct Answer: C**

**Section:**

#### QUESTION 14

You are asked to configure an LSP which uses the OSPF link state database for path computations. Which two statements are correct in this scenario? (Choose two.)

- A. You must use the no-cspf parameter in the label-switched-path configuration.
- B. Traffic engineering extensions are enabled by default in OSPF.
- C. Traffic engineering extensions are not enabled by default in OSPF.
- D. You must use the policing parameter in the label-switched-path configuration.



**Correct Answer: A, C**

**Section:**

**Explanation:**

The no-cspf command will activate usage of OSPF DB <https://www.juniper.net/documentation/us/en/software/junos/ospf/topics/topic-map/configuring-ospf-support-for-traffic-engineering.html> Not enabled by default for ospf

#### QUESTION 15

The segment touting SRGB start label is 10,000 and the SRGB index range is 500.

In this scenario, which two statements are correct? (Choose two.)

- A. The first usable label is 10,001.
- B. The last usable label is 10.501.
- C. The last usable label is 10,499.
- D. The first usable label is 10,000.

**Correct Answer: C, D**

**Section:**

#### QUESTION 16

Exhibit



```

Exhibit

root@R1> show configuration protocols isis
interface ge-0/0/0.0 {
}
interface ge-0/0/1.0 {
}
interface lo0.0;
level 1 disable;
level 2 wide-metrics-only;
reference-bandwidth 100g;
root@R1> show configuration interfaces ge-0/0/0
unit 0 {
    family inet {
        address 10.1.2.1/30;
    }
    family inet {
        address 10.1.2.1/30;
    }
    family inet6;
    family mpls;
}
root@R1> show isis adjacency
Interface      System      L State      Hold (secs) SNPA
ge-0/0/1.0     R6          2 Up         19

```

You configured interface ge-0/0/0.0 to run IS-IS. but this interface does not appear in the output of the show isis adjacency command as shown in the exhibit. What is the problem in this scenario?

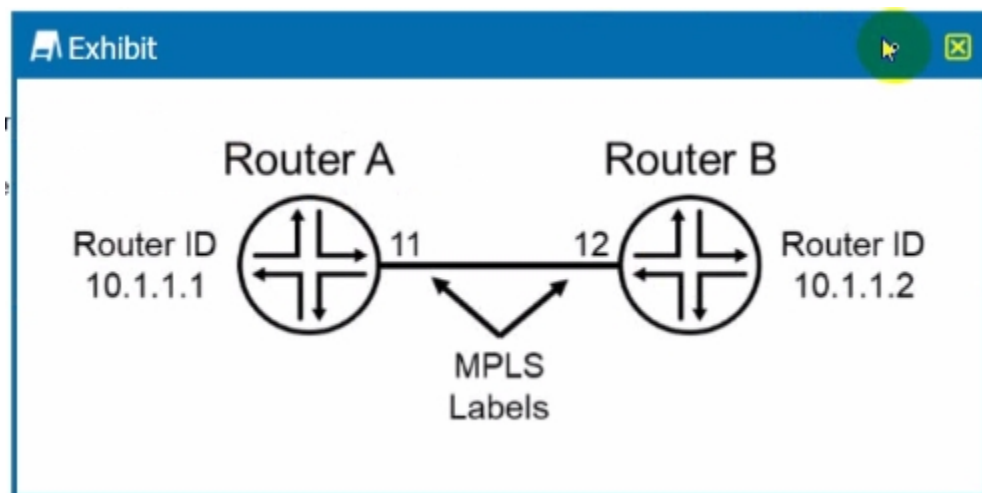
- A. This is a Gigabit Ethernet interface, that is incompatible with the reference-bandwidth 100g statement.
- B. The family iso statement must be added to the logical interface.
- C. The router at the other end of the link is not sending any IS-IS Hello messages.
- D. The router at the other end of the link is a Level 1 only router.

**Correct Answer: B**

**Section:**

**QUESTION 17**

Exhibit



The routers shown in the exhibit are configured for segment routing.

In this scenario, what is the adjacency SIO that Router B advertises to Router A?

- A. 12
- B. 10.1.1.1
- C. 10.1.1.2
- D. 11

**Correct Answer: B**

**Section:**

#### QUESTION 18

An OSPF router does not have a router ID configured.

In this scenario, which statement is correct about the router ID?

- A. The Junos OS will use the IP address assigned to the interface with the lowest MAC address.
- B. A router ID will not be assigned until it is manually configured.
- C. The Junos OS will use the IP address assigned to the loopback interface for the router ID.
- D. The Junos OS will use the IP address assigned to the Interface with the highest priority.

**Correct Answer: C**

**Section:**

**Explanation:**

The router identifier is used by BGP and OSPF to identify the routing device from which a packet originated. The router identifier usually is the IP address of the local routing device. If you do not configure a router identifier, the IP address of the first interface to come online is used. This is usually the loopback interface. Otherwise, the first hardware interface with an IP address is used

#### QUESTION 19

You want to see a detailed list of all established BGP sessions. In this scenario, what would be a valid command to accomplish this task?

- A. show bgp neighbor
- B. show bgp summary
- C. show route receive-protocol bgp <neighbor IP address>
- D. show route protocol bgp

**Correct Answer: A**

**Section:**

#### QUESTION 20

What is the correct order of BGP attributes for active route selection?

- A. next hop -> local preference -> AS path -> MED -> origin
- B. next hop -> AS path -> local preference -> origin -> MED
- C. next hop -> local preference -> AS path -> origin -> MED
- D. next hop -> origin -> local preference -> AS path -> MED

**Correct Answer: C**

**Section:**

### QUESTION 21

What are three well-known mandatory BGP attributes? (Choose three.)

- A. next hop
- B. origin
- C. community
- D. MED
- E. AS path

**Correct Answer: A, B, E**

**Section:**

**Explanation:**

<https://www.catchpoint.com/bgp-monitoring/bgp-attributes>

BGP Attribute Categories

There are four categories of BGP attributes:

Well-known mandatory: Recognized by all BGP peers, passed to all peers, and present in all Update messages. Well-known mandatory attributes include:- Next-hop- Origin- AS PATH

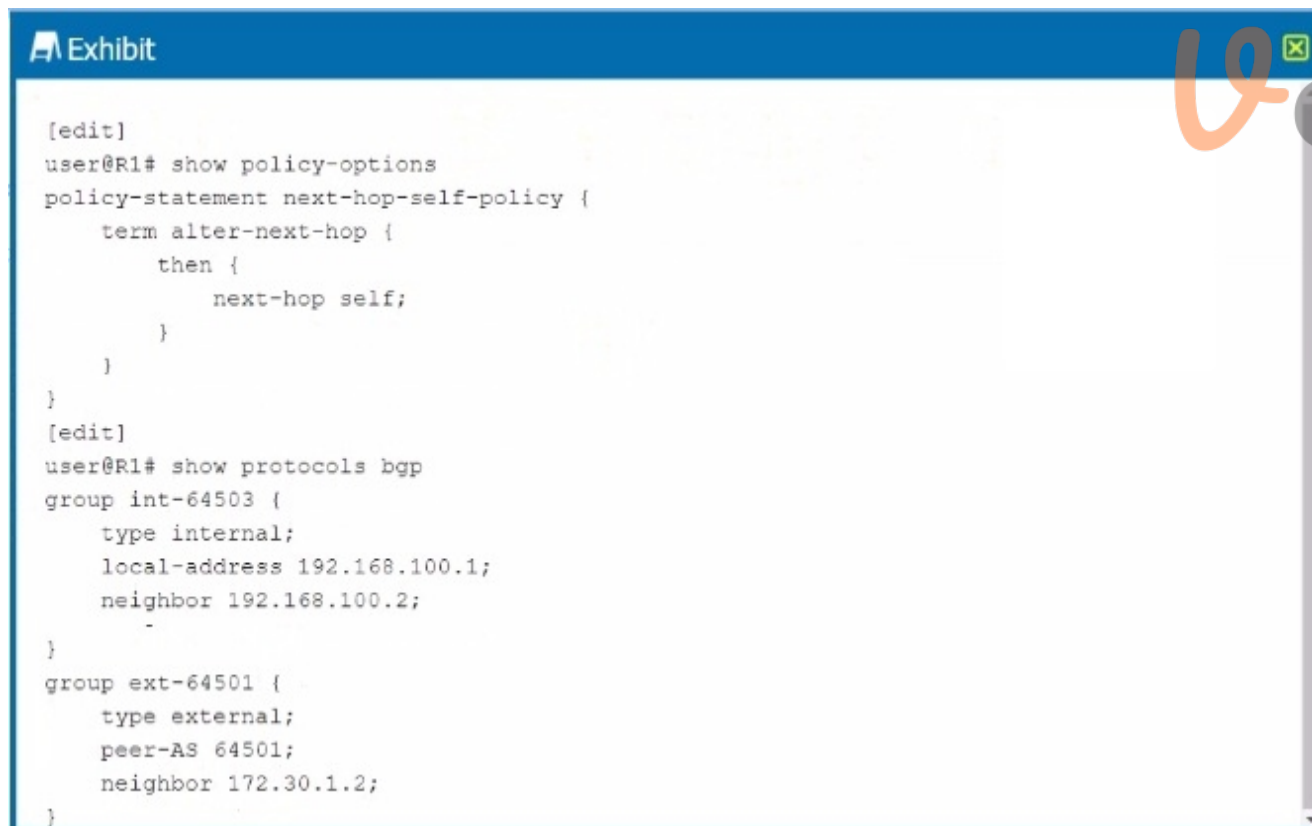
Well-known discretionary: Recognized by all routers, passed to all peers, and optionally included in the Update message. Well-known discretionary attributes include:- Local Preference- Atomic Aggregate

Optional transitive: Possibly recognized by BGP routers and passed to BGP peers. Optional transitive attributes are marked as partial when not recognized. Optional transitive attributes include:- Aggregator- Community

Optional non-transitive: Possibly recognized by BGP routers but not passed to peers. Optional non-transitive attributes include:- Multi-exit discriminator (MED)- Originator ID- Cluster-ID

### QUESTION 22

Exhibit



```
[edit]
user@R1# show policy-options
policy-statement next-hop-self-policy {
  term alter-next-hop {
    then {
      next-hop self;
    }
  }
}
[edit]
user@R1# show protocols bgp
group int-64503 {
  type internal;
  local-address 192.168.100.1;
  neighbor 192.168.100.2;
}
group ext-64501 {
  type external;
  peer-AS 64501;
  neighbor 172.30.1.2;
}
```

Referring to the exhibit, where should next-hop-self-policy be applied to alter the next-hop value?

- A. The policy is applied as an export policy for the group int-64503.
- B. The policy is applied as an export policy for the group ext-64501.
- C. The policy is applied as an import policy for the group int- 64 503.

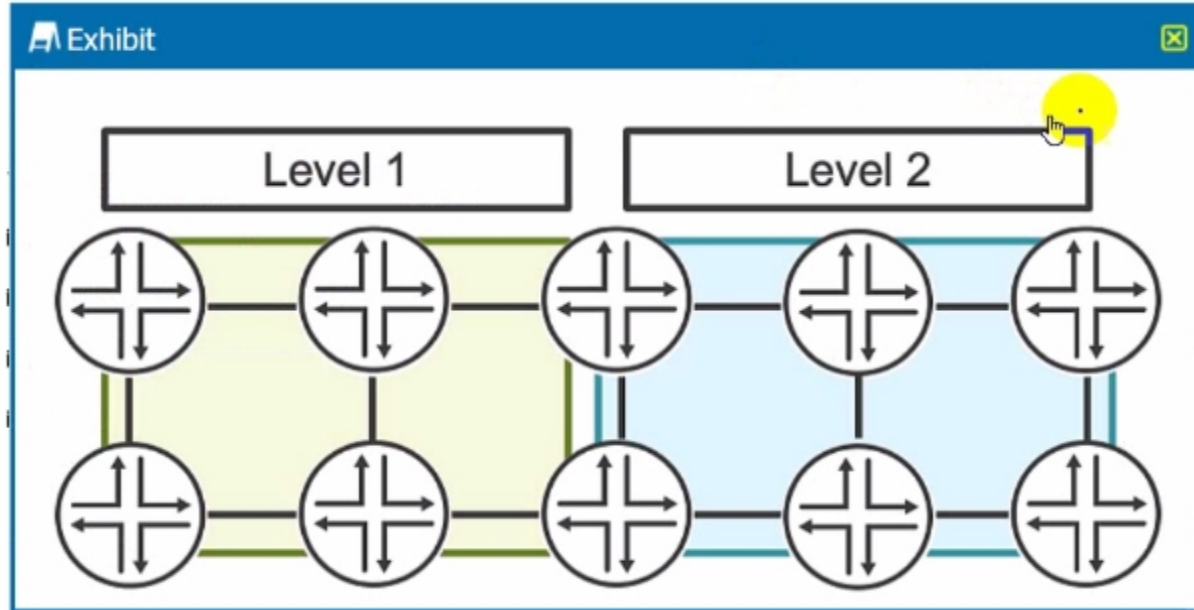
D. The policy is applied as an Import policy for the group ext-64501.

**Correct Answer: A**

**Section:**

**QUESTION 23**

Exhibit



Referring to the exhibit, which two statements are correct? (Choose two.)

- A. Prefixes in Level 1 will be redistributed to Level 2.
- B. Prefixes in Level 2 will be not redistributed to Level 1.
- C. Prefixes in Level 1 will not be redistributed to Level 2.
- D. Prefixes in Level 2 will be redistributed to Level 1.

**Correct Answer: A, B**

**Section:**

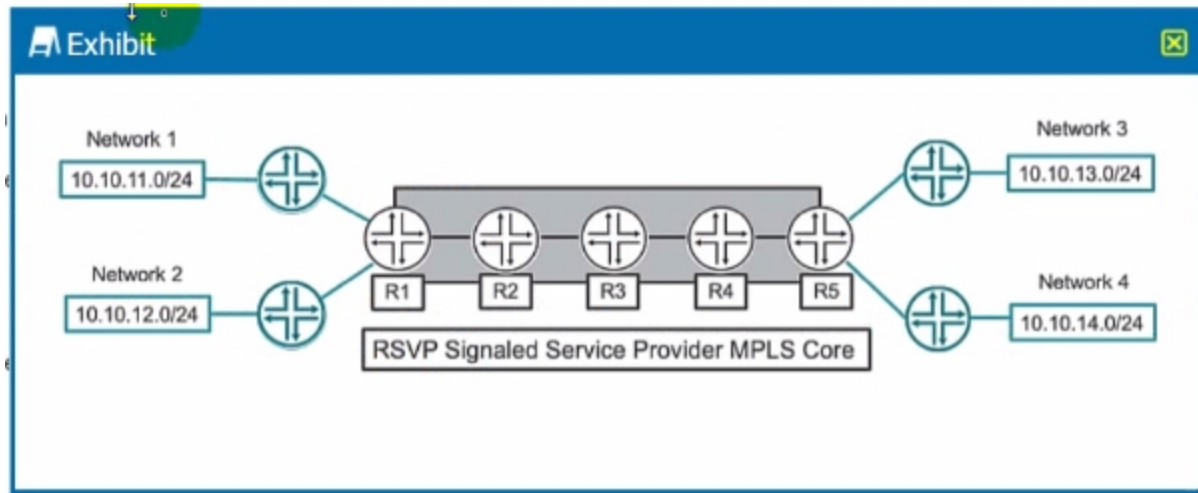
**Explanation:**

By default, IS-IS protocol leaks routing information from a Level 1 area to a Level 2 area. However, to leak routing information from a Level 2 area to a Level 1 area, an export policy must be explicitly configured.

**QUESTION 24**

Exhibit button





Which two statements are correct about the service provider MPLS network shown in the exhibit? (Choose two.)

- A. R3 will perform a label pop operation on the transport MPLS label.
- B. Traffic from Network 1 to Network 3 and traffic from Network 1 to Network 4 each need their own unique label-switched path.
- C. Traffic from Network 1 to Network 3 and from Network 1 to Network 4 can share the same label-switched path.
- D. R3 will perform a label swap operation on the transport MPLS label.

**Correct Answer: A, D**

**Section:**

**QUESTION 25**

Which two statements are correct about IS-IS? (Choose two.)

- A. A level 1 only router can never form an adjacency with a level 2 only router.
- B. For level 2 adjacencies, the area IDs can be different.
- C. For level 2 adjacencies, the area IDs must be the same.
- D. A level 1 only router can form an adjacency with a level 2 only router.

**Correct Answer: A, B**

**Section:**

**Explanation:**

A Level 1 router can become adjacent with the Level 1 and Level 1-2 (L1/L2) router. A Level 2 router can become adjacent with Level 2 or Level 1-2 (L1/L2) router. There is no adjacency between L1 only and L2 only router. HOWEVER: If two routers are in different areas, they can only form a Level 2 adjacency. As such, two routers in different areas can NOT form a Level 1 adjacency. If you want two routers to form a Level 1 adjacency, they have to be in the same area.

**QUESTION 26**

You are adding an IPv6 configuration to an Interface on a Junos device. In this scenario, which statement is correct?

- A. The link local address must be manually configured within the fd00::/8 prefix range.
- B. The link local address must be manually configured within the fe80::/10 prefix range.
- C. The link local address is automatically created using the MAC address within the fe80::/10 prefix range.
- D. The link local address is automatically created using the MAC address within the fd00::/8 prefix range.

**Correct Answer: D**



**Section:**

**QUESTION 27**

Which statement is correct about IS-IS?

- A. IS-IS is a distance vector routing protocol.
- B. IS-IS is a path vector routing protocol.
- C. IS-IS is a link-state routing protocol.
- D. IS-IS is a classful routing protocol.

**Correct Answer: C**

**Section:**

**QUESTION 28**

Which new field is added to an IPv6 header as compared to IPv4?

- A. version
- B. checksum
- C. fragment offset
- D. flow label

**Correct Answer: D**

**Section:**

**QUESTION 29**

Interface ge-0/0/0.0 connects your network to your ISP. You want to advertise this interface address as an Internal route in OSPF without creating a neighbor with your ISP. In this scenario, how is this task accomplished?

- A. Remove interface ge-0/0/0.0 from OSPF.
- B. Create a generated route for Interface ge-0/0/0.0.
- C. Add ge-0/0/0.0 as a passive interface in OSPF.
- D. Configure a static route for Interface ge-0/0/0.0.

**Correct Answer: D**

**Section:**

**QUESTION 30**

What are two types of SIDs used in segment routing? (Choose two.)

- A. node
- B. adjacency
- C. link
- D. interface

**Correct Answer: A, B**

**Section:**

**Explanation:**



### QUESTION 31

Exhibit

```
Exhibit
user@R2> show ospf route
Topology default Route Table:
Prefix          Path  Route  NH  Metric  NextHop  Nexthop
                Type  Type   Type
192.168.1.1     Intra AS BR  IP   1    ge-0/0/3.0  172.26.1.1
192.168.1.3     Intra Area BR IP   1    ge-0/0/1.0  172.26.2.2
172.18.1.0/24   Ext2  Network IP   0    ge-0/0/3.0  172.26.1.1
172.26.1.0/30   Intra Network IP   1    ge-0/0/3.0
172.26.2.0/30   Intra Network IP   1    ge-0/0/1.0
172.26.3.0/30   Intra Network IP   100  ge-0/0/2.0
172.26.4.0/30   Inter Network IP   2    ge-0/0/1.0  172.26.2.2
192.168.1.1/32  Ext2  Network IP   1    ge-0/0/3.0  172.26.1.1
192.168.1.2/32  Intra Network IP   0    lo0.0
192.168.1.3/32  Intra Network IP   1    ge-0/0/1.0  172.26.2.2
192.168.1.4/32  Inter Network IP   2    ge-0/0/1.0  172.26.2.2
```

Which prefix in the output shown in the exhibit is an external prefix injected by an OSPF router?

- A. 192.168.1.3
- B. 172.18.1.0/24
- C. 192.108.1.4
- D. 172.26.4.0/30

**Correct Answer: D**

**Section:**

### QUESTION 32

Which statement describes integrated routing and bridging (IRB) interfaces?

- A. An IRB interface is an IP gateway for hosts of a bridge domain.
- B. An IRB interface assigns interfaces to VLANs.
- C. An IRB interface enables Layer 2 switching on the router.
- D. An IRB interface defines a bridge domain.

**Correct Answer: C**

**Section:**

### QUESTION 33

Exhibit

```
Exhibit
user@router> show mpls lsp ingress detail
Ingress LSP: 1 sessions
192.168.0.3
  From: 0.0.0.0, State: Dn, ActiveRoute: 0, LSPName: to-R3
  ActivePath: (none)
  LSPTYPE: Static Configured, Penultimate hop popping
  LoadBalance: Random
  Follow destination IGP metric
  Encoding type: Packet, Switching type: Packet, GPID: IPv4
  LSP Self-ping Status : Enabled
  Primary          State: Dn
  Priorities: 7 0
  SmartOptimizeTimer: 180
  Flap Count: 0
  MBB Count: 0
  Will be enqueued for recomputation in 18 second(s).
  1 Mar 9 23:22:22.998 CSFP: could not determine self
user@router> show ted database
TED database: 0 ISIS nodes 0 INET nodes
[edit protocols]
user@router# show
ospf {
  area 0.0.0.0 {
    interface ge-0/0/2.0;
    interface ge-0/0/4.0;
  }
}
rsvp {
  interface all;
}
bgp {
  group Int {
    type internal;
    local-address 192.168.0.1;
    export nhs;
    neighbor 192.168.0.3;
  }
}
mpls {
  label-switched-path to-R3 {
    to 192.168.0.3;
  }
  interface all;
}
```



The LSP is not establishing correctly.  
Referring to the exhibit, what should you do to solve the problem?

- A. Enable traffic engineering for the OSPF protocol.
- B. Enable traffic engineering for the IS-IS protocol.
- C. Enable traffic engineering for the BGP protocol.
- D. Enable traffic engineering for the RSVP protocol.

**Correct Answer: D**



**Section:**

**QUESTION 34**

You are bringing a new network online with three MX Series devices enabled for STP. No root bridge priority has been configured. Which statement is true in this scenario?

- A. The device with the lowest MAC address will be elected as the root bridge.
- B. The device with the highest MAC address will be elected as the root bridge.
- C. The device with the lowest numerical lo0 IP address will be elected as the root bridge.
- D. The device with the highest numerical lo0 IP address will be elected as The bridge.

**Correct Answer: A**

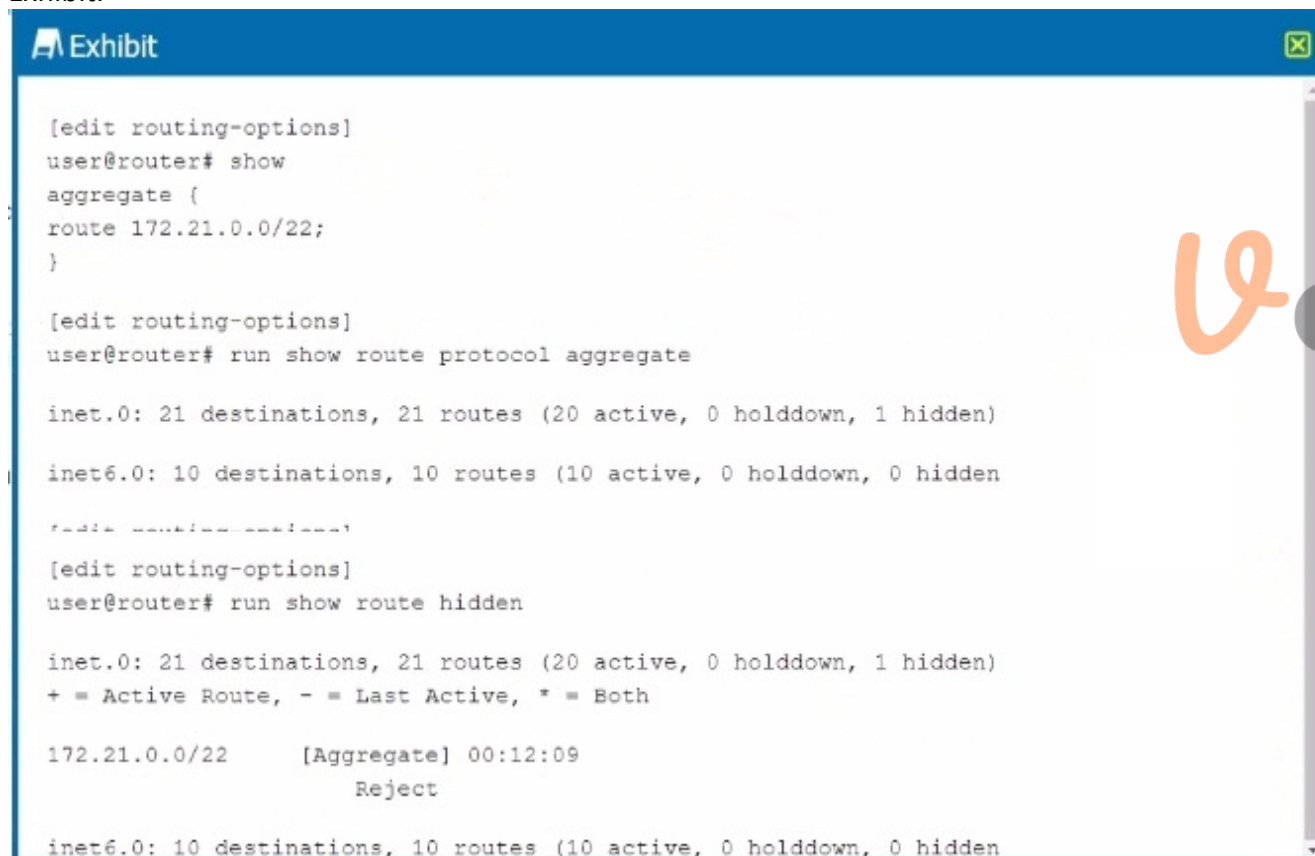
**Section:**

**Explanation:**

[https://supportportal.juniper.net/s/article/EX-Identify-the-Root-Bridge-in-a-Spanning-Tree-STP-network?language=en\\_US](https://supportportal.juniper.net/s/article/EX-Identify-the-Root-Bridge-in-a-Spanning-Tree-STP-network?language=en_US) The root bridge in a spanning-tree network is the bridge with the smallest or the lowest bridge ID.

**QUESTION 35**

Exhibit.



```
[edit routing-options]
user@router# show
aggregate {
route 172.21.0.0/22;
}

[edit routing-options]
user@router# run show route protocol aggregate

inet.0: 21 destinations, 21 routes (20 active, 0 holddown, 1 hidden)
inet6.0: 10 destinations, 10 routes (10 active, 0 holddown, 0 hidden)
-----
[edit routing-options]
user@router# run show route hidden

inet.0: 21 destinations, 21 routes (20 active, 0 holddown, 1 hidden)
+ = Active Route, - = Last Active, * = Both

172.21.0.0/22    [Aggregate] 00:12:09
                Reject

inet6.0: 10 destinations, 10 routes (10 active, 0 holddown, 0 hidden)
```

Referring to the exhibit, you have configured an aggregate route that represents the 172.21.0.0/24, 172.21.1.0/24, and 172.21.2.0/24 networks. However, when you view the routing table, your new route hidden. Which action would you perform to determine the problem?

- A. Verify that you have active contributing routes on the device.
- B. Verify that you have configured a policy on the device to accept aggregate routes.
- C. Verify that you have defined a metric value for the aggregate route.
- D. Verify that you have set the preference to a lower default value.

**Correct Answer: D**

**Section:**

**QUESTION 36**

What are two bridging concepts that are used to maintain an Ethernet switching table? (Choose two.)

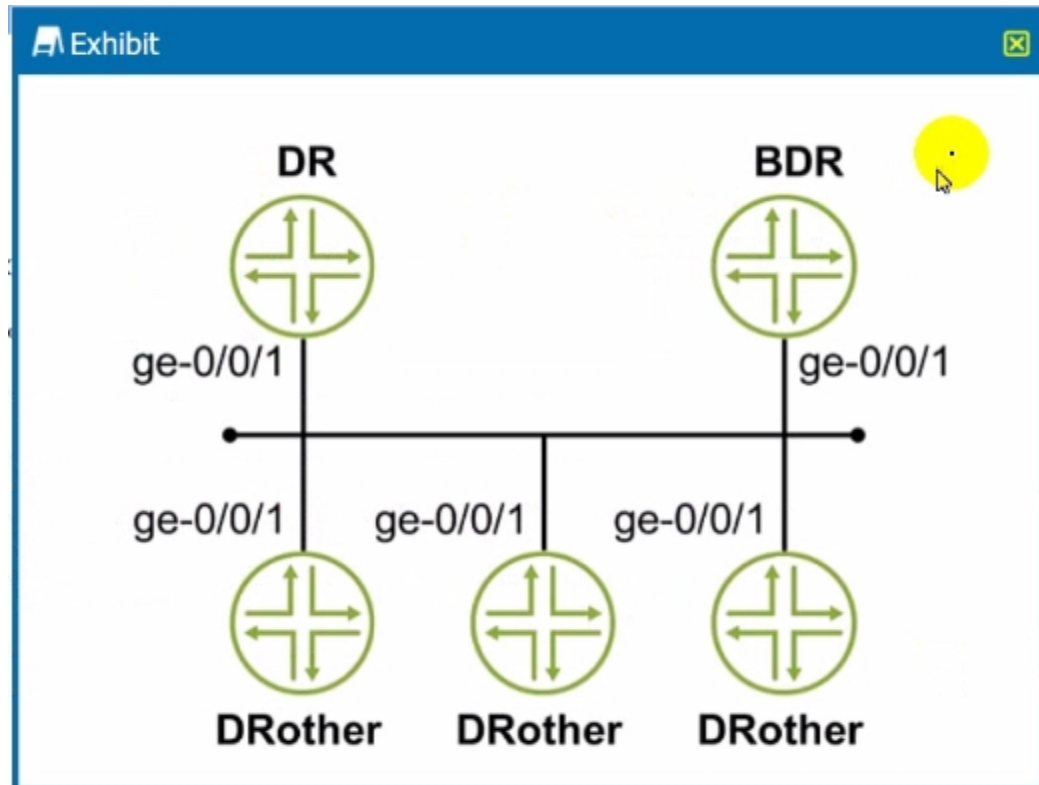
- A. learning
- B. exporting
- C. aging
- D. timing

**Correct Answer: A**

**Section:**

**QUESTION 37**

Exhibit



You are asked to configure the OSPF environment to prevent the DRothes routers from participating in DR/BDR election. Referring to the exhibit, which command will accomplish this task?

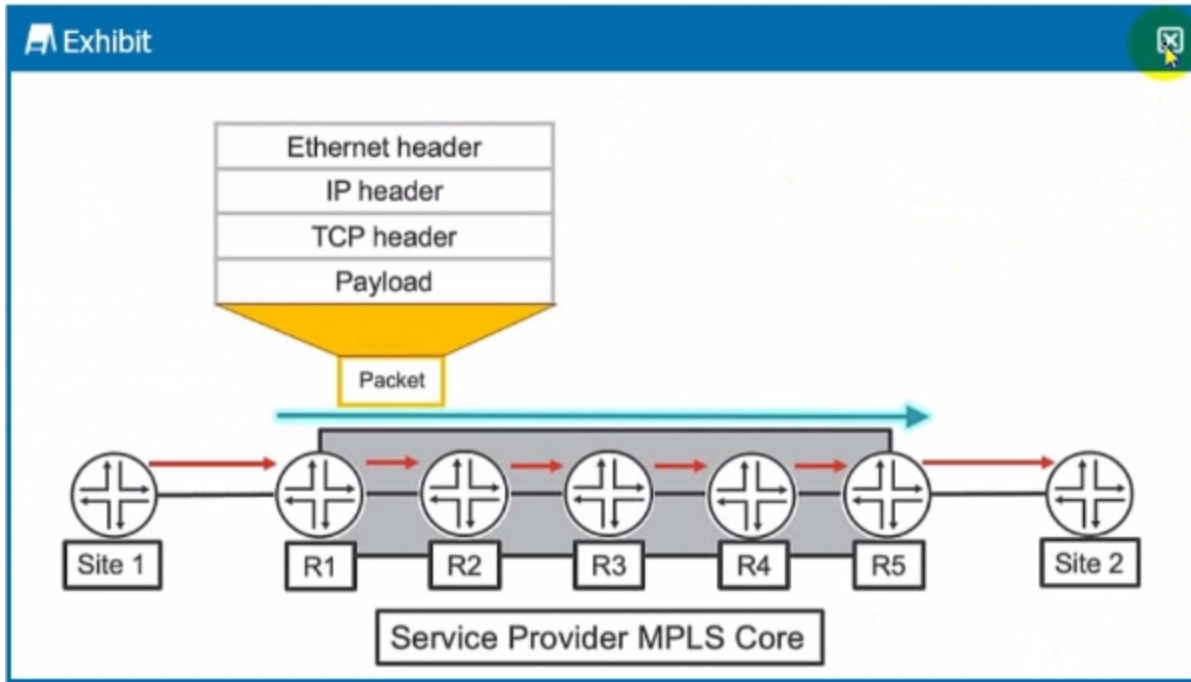
- A. set protocols ospf area 0.0.0.0 interface ge-0/0/1 priority 255
- B. set protocols ospf area 0.0.0.0 interface ge-0/0/1 priority 0
- C. set protocols ospf area 0.0.0.0 interface ge-0/0/1 interface-type nbma
- D. set protocols ospf area 0.0.0.0 interface ge---0/0/1 interface-type p2p

**Correct Answer: A**

**Section:**

**QUESTION 38**

Exhibit



Which two statements are correct about the actions taken as the packet traverses the service provider MPLS network from Site 1 to Site 2 as shown in the exhibit? (Choose two.)

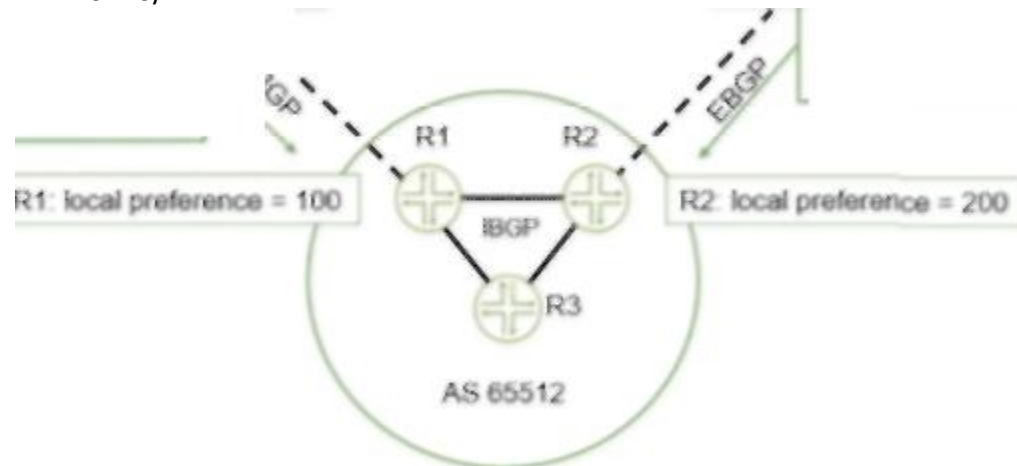
- A. R2 will perform a lookup using the mpls.0 table.
- B. R1 will perform a lookup using the inet.3 table.
- C. R1 will perform a lookup using the mpls.0 table.
- D. R2 will perform a lookup using the inet.3 table.

**Correct Answer: A**  
**Section:**



**QUESTION 39**

Exhibit  
 S Exhibit  
 LSI1 A AS 65501  
 ISPB AS 65502  
 Advertised Prefixes: 172.20.0.0/24 172.20.20.0/24 172.20.21.0/24  
 \ N  
 Advertised Prefixes: 172.20.0.0/24  
 172.20.1.0/24



Referring to the exhibit, which two statements are correct? (Choose two.)

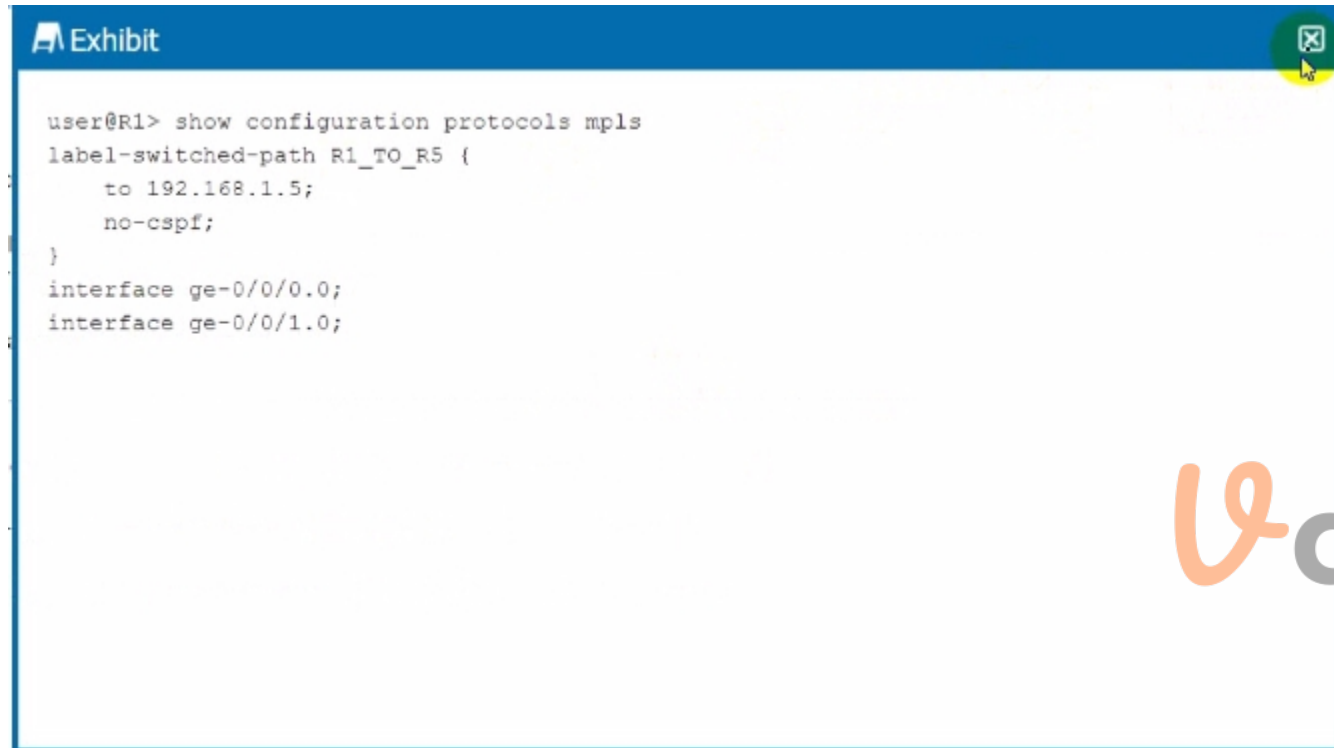
- A. Devices in AS 65512 will prefer ISP A for traffic destined to the 172.20.21.0/24 network.
- B. Devices In AS 65512 will prefer ISP A for traffic destined to the 172.20.0.0/24 network.
- C. Devices in AS 65512 will prefer ISP B for traffic destined to the 172.20.21.0/24 network.
- D. Devices In AS 65512 will prefer ISP B for traffic destined to the 172.20.0.0/24 network.

**Correct Answer: C**

**Section:**

#### QUESTION 40

Exhibit



```
user@R1> show configuration protocols mpls
label-switched-path R1_TO_R5 {
  to 192.168.1.5;
  no-cspf;
}
interface ge-0/0/0.0;
interface ge-0/0/1.0;
```

You have an established LSP between your R1 and R5 devices using the configuration shown in the exhibit. You are asked to ensure that MPLS labels are used to forward traffic by all devices within the LSP. Which action will accomplish this behavior?

- A. Configure the ultimate-hop-popping statement under the R1\_TO\_R5 label switched path on R1.
- B. Configure the explicit-null statement under the protocol mpls hierarchy on R1.
- C. Delete the no-cspf statement under the R1\_TO\_R5 label switched path on R1.
- D. Configure the install statement under the R1\_TO\_R5 label switched path on R1.

**Correct Answer: D**

**Section:**

**Explanation:**

<https://www.juniper.net/documentation/us/en/software/junos/mpls/topics/ref/statement/install-edit-protocols-mpls.html>

#### QUESTION 41

What are three types of MPLS routers? (Choose three.)

- A. transit routers
- B. peering routers

- C. egress routers
- D. aggregation routers
- E. ingress routers

**Correct Answer: A, C, E**

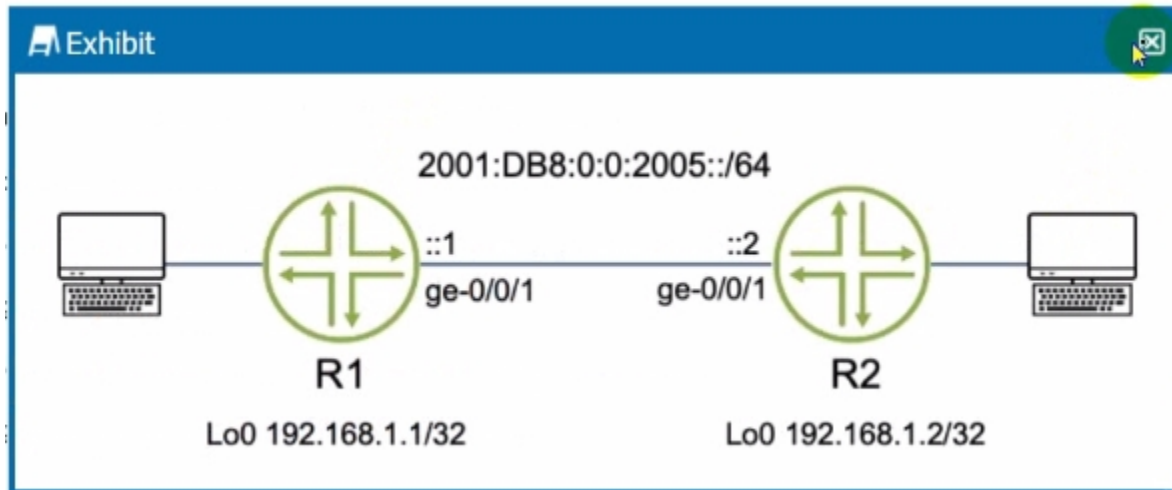
**Section:**

**Explanation:**

<https://www.juniper.net/documentation/us/en/software/junos/mpls/topics/topic-map/lsp-routers.html>

**QUESTION 42**

Exhibit



You are asked to configure OSPF between routers R1 and R2 using IPv6 addresses. Which two tasks will accomplish your objective? (Choose two.)

- A. Issue the `set protocols ospf area 0.0.0.0 interface ge-0/0/1.0` command.
- B. Under the `[edit routing-options]` hierarchy, configure a 32-bit router ID.
- C. Issue the `set protocols ospf3 area 0.0.0.0 interface ge-0/0/1.0` command.
- D. Under the `[edit routing-options]` hierarchy, configure a 128-bit router ID.

**Correct Answer: B, C**

**Section:**

**QUESTION 43**

You want to enable a routing platform with redundant REs to switch from a primary RE to a backup RE without alerting peer nodes. Which two technologies would you use to satisfy this requirement? (Choose two.)

- A. GRES
- B. VRRP
- C. NSR
- D. ISSU

**Correct Answer: B, C**

**Section:**

**QUESTION 44**

Exhibit

```
Exhibit
[edit routing-options]
user@R1# show
static {
  defaults {
    preference 20;
  }
  route 0.0.0.0/0 {
    next-hop 172.24.0.1;
    preference 5;
  }
  route 172.24.0.0/24 next-hop [ 172.24.0.100 172.24.0.101 ];
forwarding-table {
  export lbpp;
}
[edit]
user@R1# show policy-options policy-statement lbpp
term 1 {
  then {
    load-balance per-packet;
  }
}
```

Which type of load balancing is shown in the exhibit?

- A. elastic load balancing
- B. per-packet load balancing
- C. per-flow load balancing
- D. network load balancing

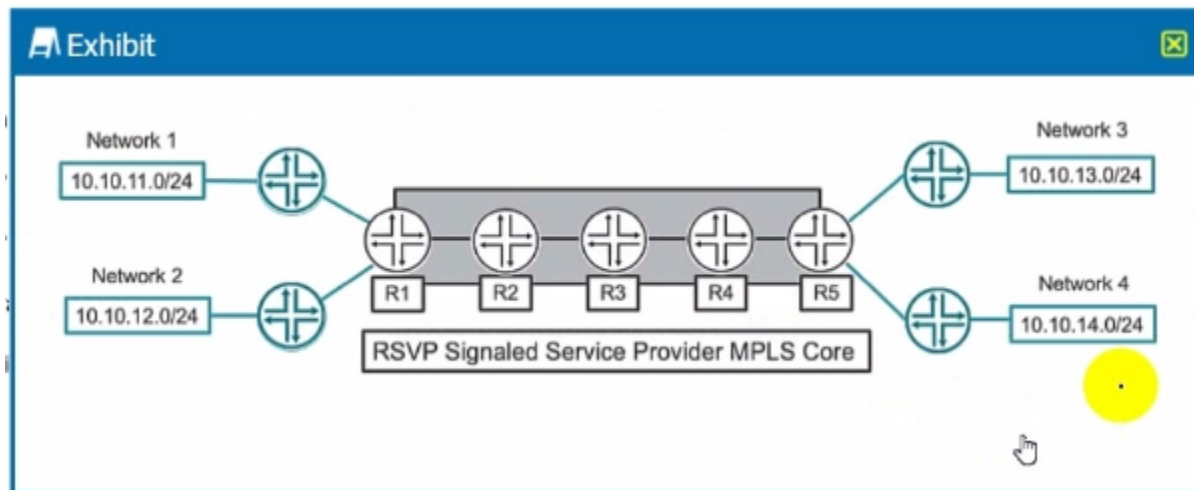


**Correct Answer: D**

**Section:**

**QUESTION 45**

Exhibit



Which two statements are correct about the service provider MPLS network shown in the exhibit? (Choose two.)

- A. R3 is considered a P router.
- B. R3 is considered a PE router.

- C. R3 is considered a transit router.
- D. R3 is considered an ingress router.

**Correct Answer: A, C**

**Section:**

**QUESTION 46**

You have created a routing instance named vr3 that will provide access to Server 2 (10.0.0.2) (or the hosts on the 10.10.10.0/24 network. Which command would you use to test connectivity between vr3 and Server 2?

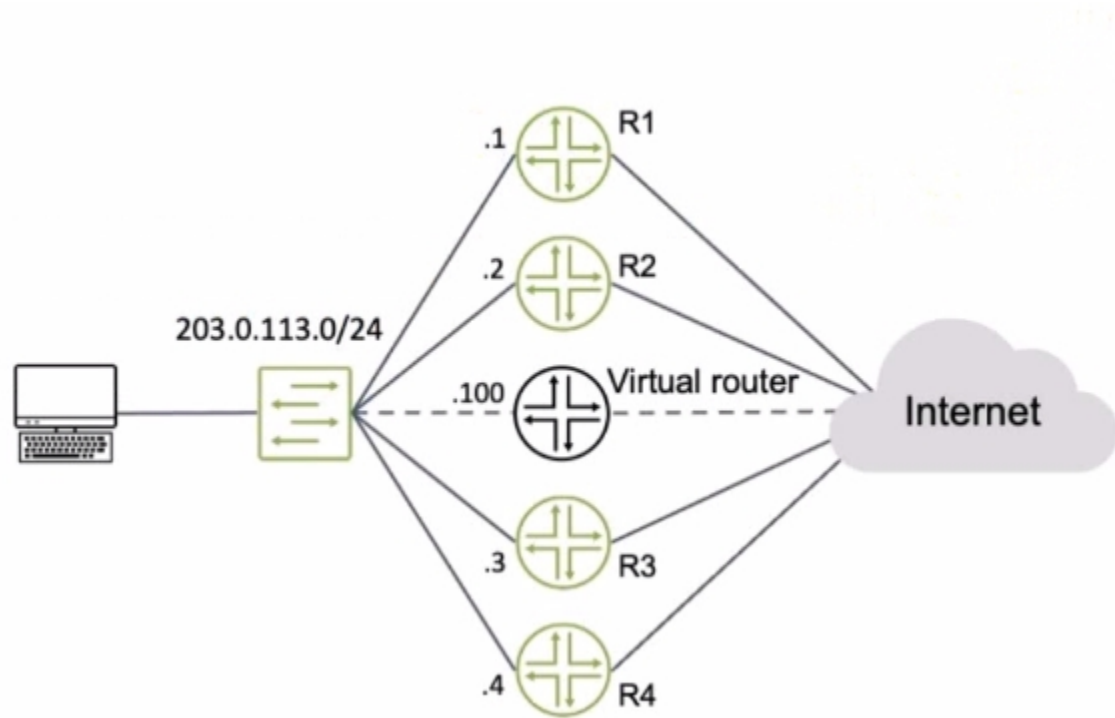
- A. user@vr3> ping 10.0.0.2 count 5
- B. user@vr3> ping 10.0.0.2 count 5 source 10.10.10.1
- C. user@router1> ping 10.0.0.2 count 5
- D. user@router1> ping 10.0.0.2 routing-instance vr3 count 5

**Correct Answer: C**

**Section:**

**QUESTION 47**

Exhibit



Routers R1 and R4 have a VRRP priority of 90, while R2 and R3 have default VRRP priorities Referring to the exhibit, which router will be elected as the primary VRRP router?

- A. R3
- B. R4
- C. R2
- D. R1

**Correct Answer: A**

**Section:**

**Explanation:**

'Default: 100. If two or more devices have the highest priority in the VRRP group, the device with the VRRP interface that has the highest IP address becomes the primary, and the others serve as backups.'  
<https://www.juniper.net/documentation/us/en/software/junos/high-availability/topics/ref/statement/priority-edit-interfaces-vrrp.html>

**QUESTION 48**

Click the Exhibit button.

```
[edit]
user@R1# show protocols mpls
label-switched-path R1-to-R6 {
    to 10.1.1.6;
    primary via-R2-R4;
    secondary any-path;
}
path via-R2-R4 {
    10.1.1.2 strict;
    10.1.1.4 strict;
}
path any-path;
interface ge-0/0/0.0;
interface ge-0/0/1.0;
```

All devices in the network are configured correctly and the path requirements are valid. Referring to the exhibit, which two statements are correct? (Choose two.)

- A. The primary LSP will be signaled, and its state will be up.
- B. The secondary LSP will not be signaled, and its state will be down.
- C. The secondary LSP will be signaled, and its state will be up.
- D. The primary LSP will not be signaled, and its state will be down.

**Correct Answer: A, B**

**Section:**

**QUESTION 49**

By default, which two statements are correct about switch ports on a Junos device? (Choose two.)

- A. Trunk ports receive and transmit untagged traffic.
- B. Access ports receive and transmit tagged traffic.
- C. Trunk ports receive and transmit tagged traffic.
- D. Access ports receive and transmit untagged traffic.

**Correct Answer: C, D**

**Section:**

**QUESTION 50**

Which BGP message type is used to re-advertise routes that have already been sent to a peer and acknowledged using TCP?

- A. update
- B. keepalive





- C. notification
- D. refresh

**Correct Answer: D**

**Section:**

**Explanation:**

The BGP (Border Gateway Protocol) refresh message is used to request the re-advertisement of the IPv4 unicast or multicast routing information that was previously sent by the sender to the receiver and acknowledged using TCP. This message helps in refreshing the routes in case of route table changes or to ensure that the receiver has the latest and most accurate routing information.

#### QUESTION 51

Which new field is added to an IPv6 header as compared to IPv4?

- A. flow label
- B. checksum
- C. fragment offset
- D. version

**Correct Answer: A**

**Section:**

**Explanation:**

<https://www.omniseccu.com/tcpip/ipv6/comparison-between-ipv4-header-and-ipv6-header.php#:~:text=IPv6%20header%20is%20much%20simpler%20than%20IPv4%20header.&text=The%20size%20of%20IPv6%20header,are%20128%20bit%20binary%20numbers.&text=In%20IPv4%20header%2C%20the%20source,are%2032%20bit%20binary%20numbers.>

#### QUESTION 52

You are troubleshooting two OSPF routers that have an adjacency that remains in the ExStart state. What would cause this problem?

- A. mismatched OSPF hello intervals on the OSPF interfaces
- B. mismatched authentication settings on the OSPF interfaces
- C. mismatched MTU settings on the OSPF interfaces
- D. mismatched subnet settings on the OSPF interfaces

**Correct Answer: C**

**Section:**

**Explanation:**

<https://www.cisco.com/c/en/us/support/docs/ip/open-shortest-path-first-ospf/13684-12.html#anc13>

Neighbors Stuck in Exstart/Exchange State The problem occurs most frequently when you attempt to run OSPF between a Cisco router and another vendor router. The problem occurs when the maximum transmission unit (MTU) settings for neighboring router interfaces do not match. If the router with the higher MTU sends a packet larger than the MTU set on the neighboring router, the neighbor router ignores the packet. When this problem occurs, the output of the show ip ospf neighbor command displays output similar to what is shown in this figure.

#### QUESTION 53

Which two statements are correct about the BGP next-hop attribute value? (Choose two.)

- A. By default, the next-hop value is changed across IBGP links.



- B. By default, the next-hop value is changed across EBGP links.
- C. By default, the next-hop value is not changed across IBGP links.
- D. By default, the next-hop value is not changed across EBGP links.

**Correct Answer: B, C**

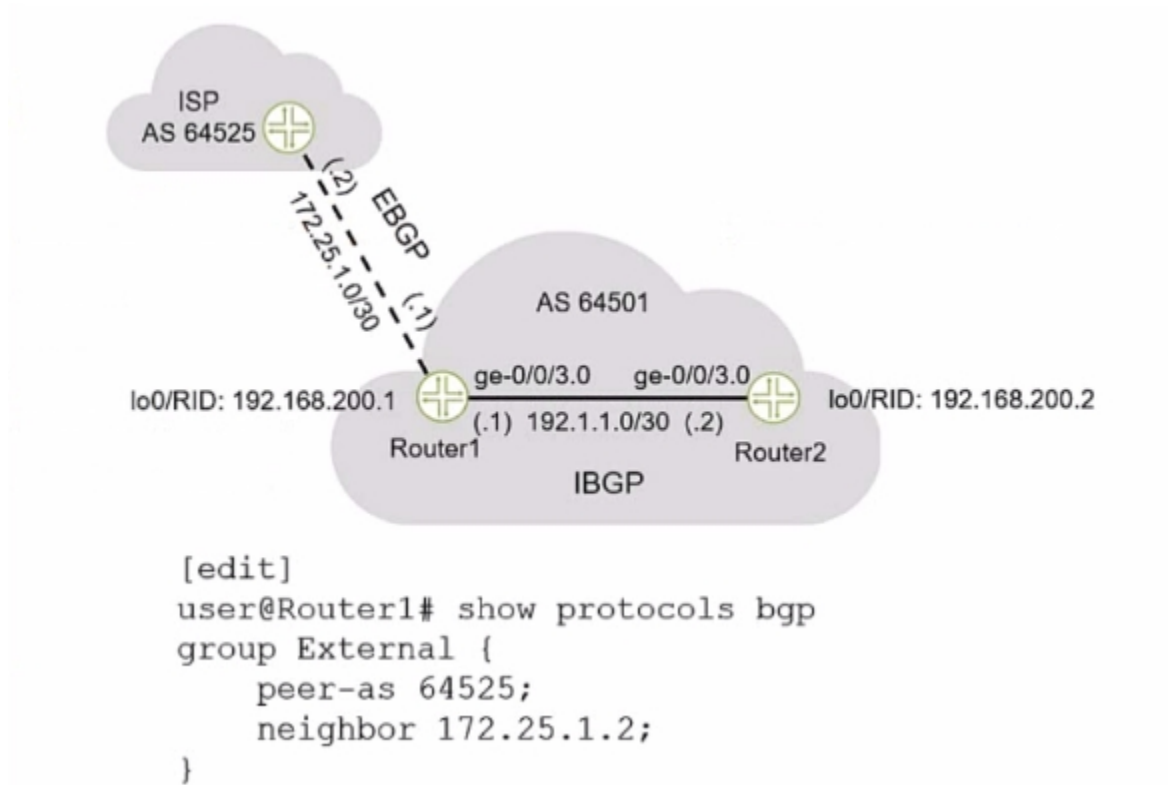
**Section:**

**Explanation:**

By default, the router that originally sourced the route into BGP places its peer address into the attribute field. The next-hop value is then typically changed when the route is transmitted across external gGP (EBGP) links. Internal BGP (IBGP) peers do not alter the next-hop value between themselves.

**QUESTION 54**

Exhibit



Referring to the exhibit, what must be included in the Route1 configuration when establishing an EBGP session with the ISP?

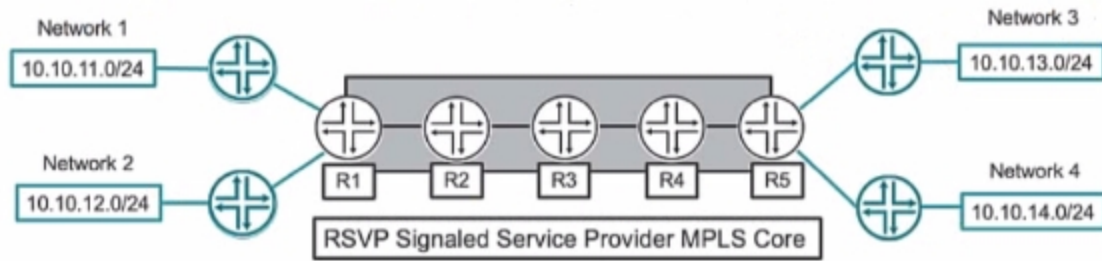
- A. A local address must be specified.
- B. A local AS must be specified.
- C. The BGP session type internal must be specified.
- D. The BGP session type external must be specified.

**Correct Answer: A**

**Section:**

**QUESTION 55**

Exhibit



Referring to the exhibit, what is the minimum number of LSPs required to support all four networks?

- A. 1
- B. 2
- C. 8
- D. 4

**Correct Answer: C**

**Section:**

**Explanation:**

Network 1 to Network 3  
 Network 1 to Network 4  
 Network 2 to Network 3  
 Network 2 to Network 4  
 and vice-versa

**QUESTION 56**

Which OSPF database packet determines which router is in charge of the database synchronization and the transferring of LSA headers between the two systems?

- A. link-state request
- B. database description
- C. hello
- D. link-state update

**Correct Answer: B**

**Section:**

**Explanation:**

the Database Description (DD) packets serve two main purposes:  
 1. determining which router is in charge of the database synchronization  
 2. transferring the LSA headers between the two systems

**QUESTION 57**

You are asked to configure filter-based forwarding on a Junos device. Which two statements are correct in this scenario? (Choose two.)

- A. You must create a routing policy.
- B. You must create a route target.
- C. You must create and apply a match filter.
- D. You must create a routing instance.

**Correct Answer: C, D**

**Section:**

**Explanation:**

To configure filter-based forwarding, perform the following tasks: Create a match filter on the ingress device. To specify a match filter, include the filter filter-name statement at the [edit firewall] hierarchy level. A packet that passes through the filter is compared against a set of rules to classify it and to determine its membership in a set. Once classified, the packet is forwarded to a routing table specified in the accept action in the filter description language. The routing table then forwards the packet to the next hop that corresponds to the destination address entry in the table. Create routing instances that specify the routing table(s) to which a packet is forwarded, and the destination to which the packet is forwarded at the [edit routing-instances] hierarchy level.

