300-510 Q&As

Implementing Cisco Service Provider Advanced Routing Solutions (SPRI)

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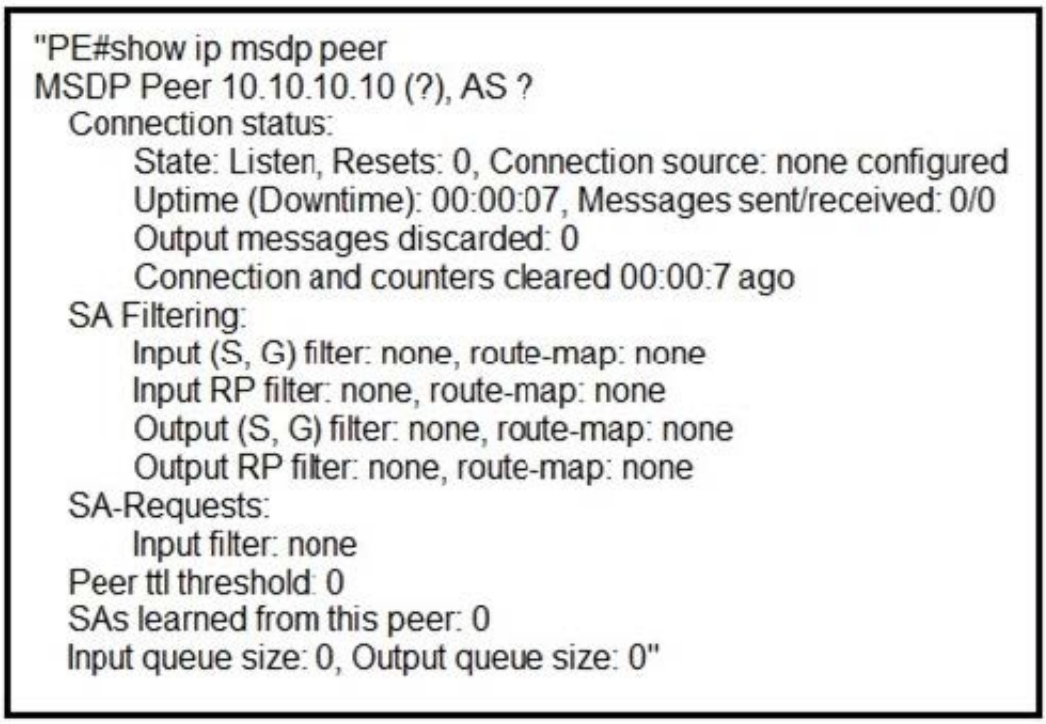
QUESTION 1

Refer to the exhibit.



A service provider technician is working on a multicast issue for a customer. While checking the multicast table, the technician notices that no flags are present for the (1.1.1.1, 239.1.1.1) entry, yet flags are present for the (1.1.1.1, 232.1.1.1) entry.

Which factor might explain this issue?

A. Only the administratively scoped range is permitted

B. Only ASM is permitted

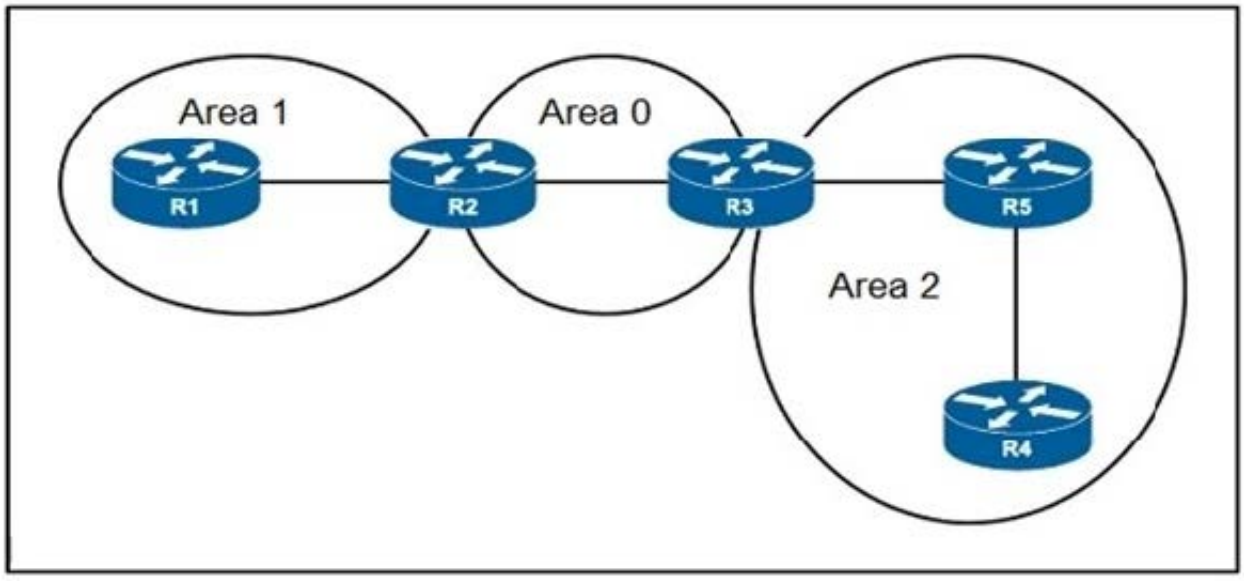
C. Only the default SSM range is permitted

D. Only GLOP is permitted

Correct Answer: C

QUESTION 2

Refer to the exhibit.



A network engineer applied configuration on R5 to summarize all OSPF routes, but R4 is still receiving specific routes from R5. The engineer has confirmed that both R5 and R4 routers are configured with correct summarization configuration, but R5 is not sending the summary routes. What action must the engineer take to fix the problem?

A. Remove summarization configuration on R5 and configure it on R4

B. Clear link-state database on both R4 and R5 routers for summarization to work

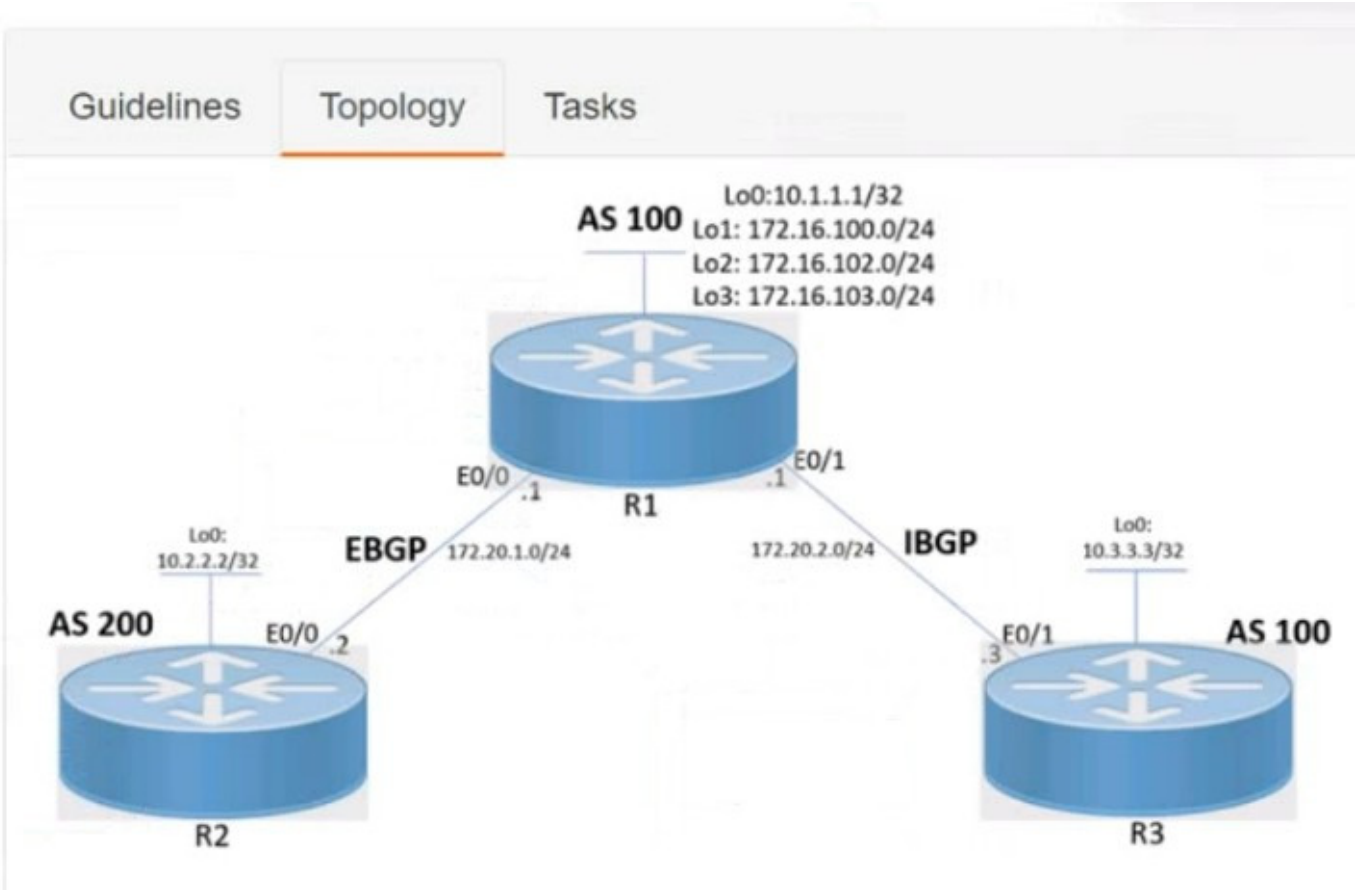
C. Configure a sham link between R4 and R5 to support summarization within Area 2

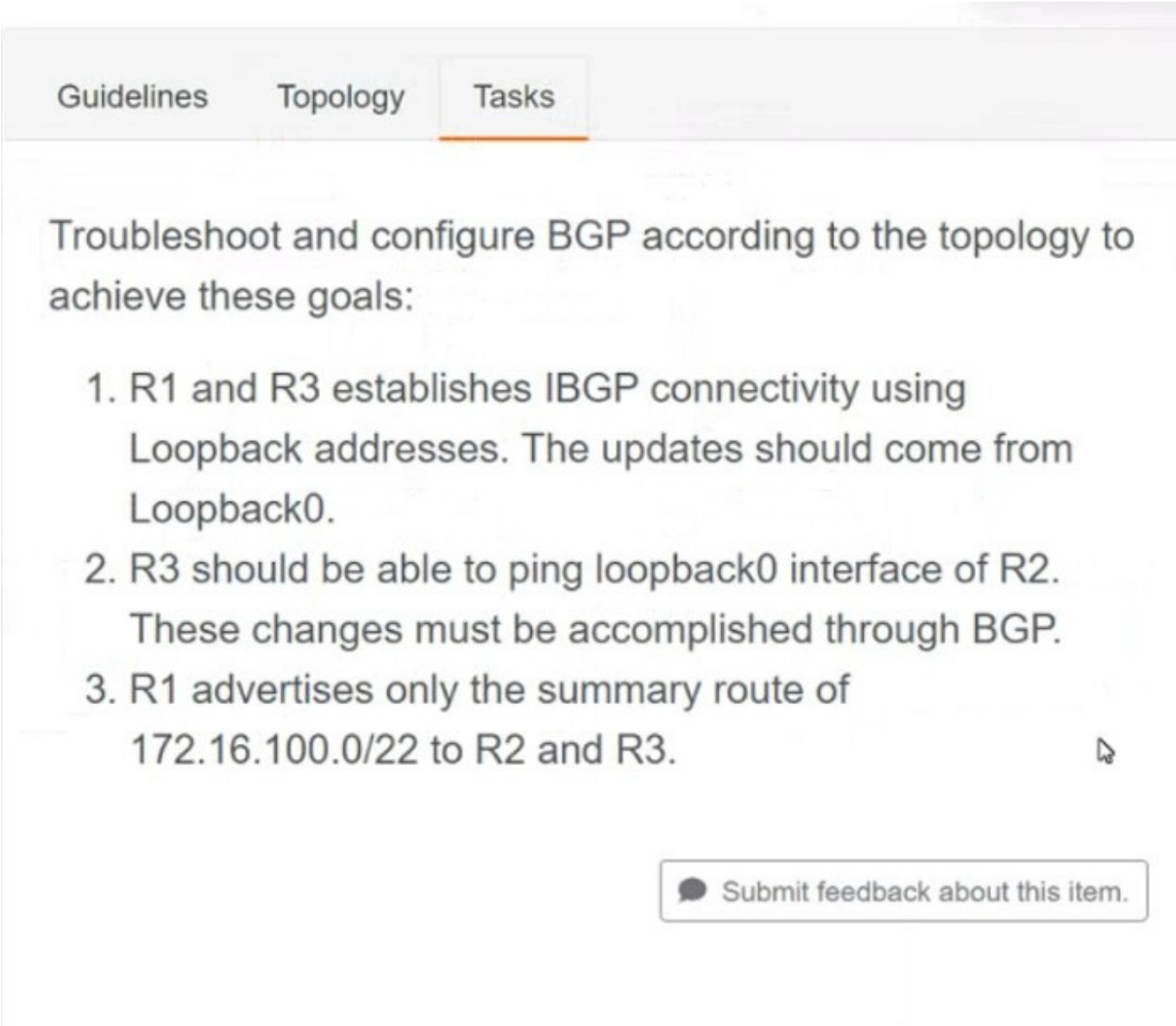
D. Move R4 and R5 in separate areas as now they maintain the same link-state database

Correct Answer: D

QUESTION 3

CORRECT TEXT


Guidelines
Topology
Tasks
AS 100
Lo0:10.1.1.1/32
Lo1: 172.16.100.0/24
Lo2: 172.16.102.0/24
Lo3: 172.16.103.0/24
R1
E0/0
.1
E0/1
.1
EBGP
172.20.1.0/24
172.20.2.0/24
IBGP
Lo0:
10.2.2.2/32
AS 200
E0/0
.2
R2
Lo0:
10.3.3.3/32
E0/1
.3
AS 100
R3



A. Check the answer in the explanation

B. Placeholder

C. Placeholder

D. Placeholder

Correct Answer: A

Solution : R1 Router bgp 100 Neigh 10.3.3.3 remote-as 100 Neigh 10.3.3.3 update-source loopback0

Address-family ipv4 Neigh 10.3.3.3 next-hop-self Aggregate-address 172.16.100.0 255.255.252.0 summary-only

Copy run start

R3 Router bgp 100 Neigh 10.1.1.1 remote-as 100 Neigh 10.1.1.1 update-source loopback 0

Copy run start

Verification:

```
R3#ping 10.2.2.2
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.2.2.2, timeout is 2 seco
nds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1
/1/1 ms
R3#
```

```
R3#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mob
ile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF in
ter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA externa
l type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2
- IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-
user static route
       o - ODR, P - periodic downloaded static route, H - NHR
P, l - LISP
       a - application route
       + - replicated route, % - next hop override, p - overr
ides from PfR

Gateway of last resort is not set

      10.0.0.0/32 is subnetted, 3 subnets
S        10.1.1.1 [1/0] via 172.20.2.1
B        10.2.2.2 [200/0] via 10.1.1.1, 00:00:19
C        10.3.3.3 is directly connected, Loopback0
      172.16.0.0/22 is subnetted, 1 subnets
B        172.16.100.0 [200/0] via 10.1.1.1, 00:00:02
      172.20.0.0/16 is variably subnetted, 3 subnets, 2 masks
B        172.20.1.0/24 [200/0] via 10.1.1.1, 00:00:19
C        172.20.2.0/24 is directly connected, Ethernet0/1
L        172.20.2.3/32 is directly connected, Ethernet0/1
R3#
```

QUESTION 4

What is the characteristic of enabling segment routing for IGPs?

A. Segment routing must first be enabled under the routing process and then globally.

B. Segment routing must first be enabled globally and then under the routing process.

C. Segment routing must be enabled only globally.

D. Segment routing must be enabled only under the routing process.

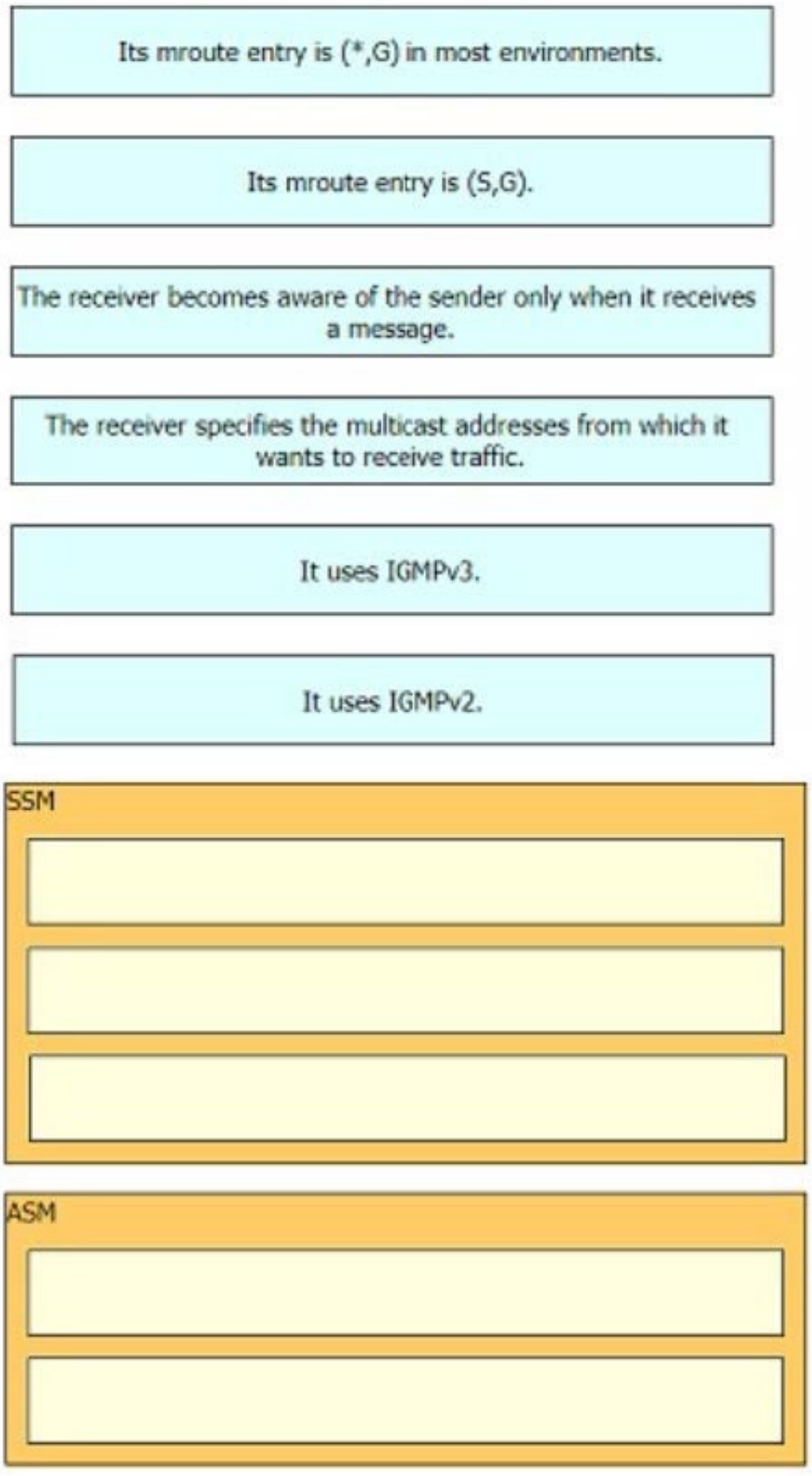
Correct Answer: B

QUESTION 5

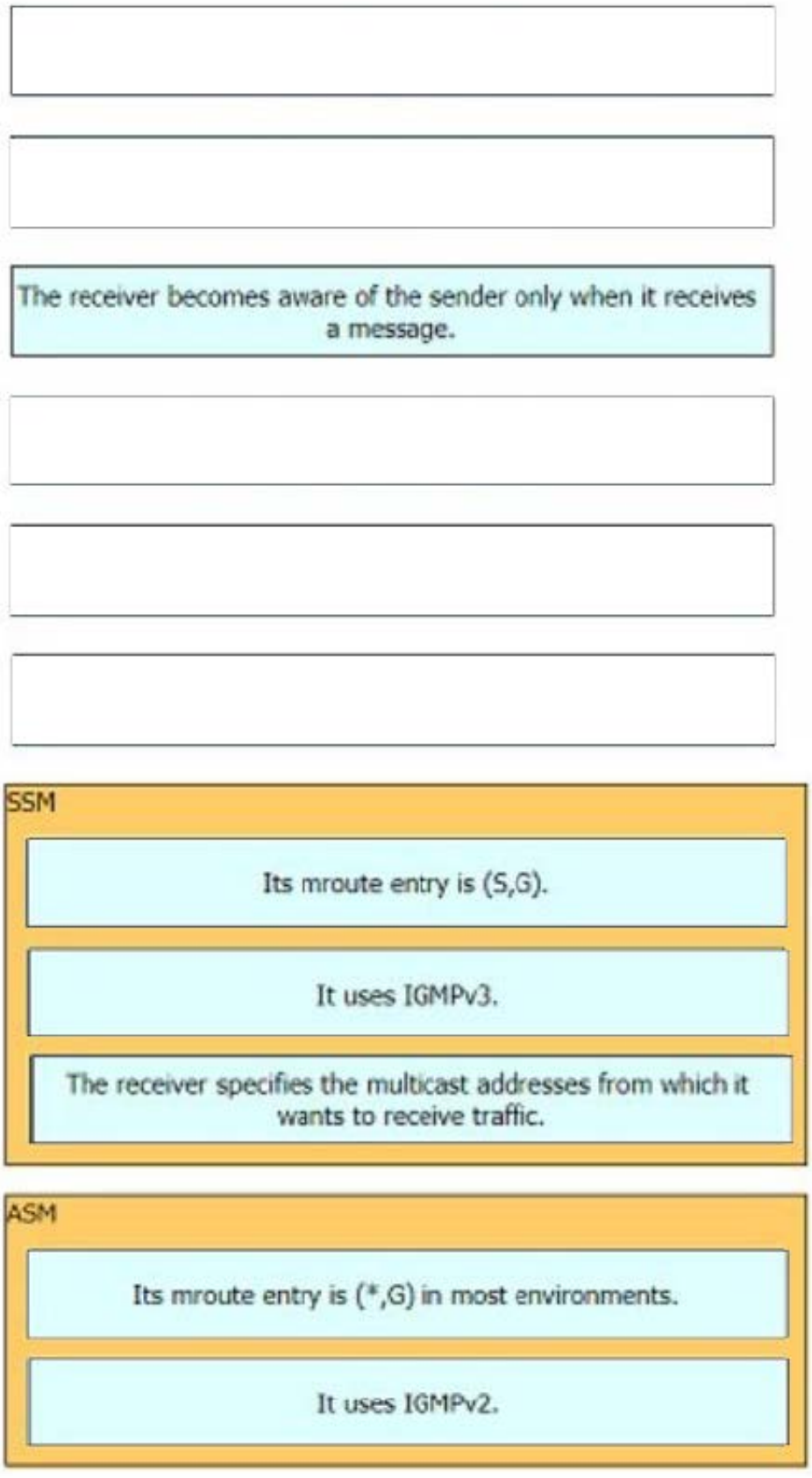
DRAG DROP

Drag and drop the features about multicast from the left onto the multicast protocols on the right. Not all options ate used.

Select and Place:

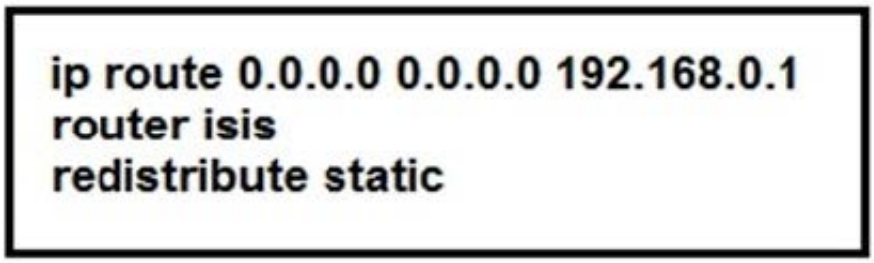


Correct Answer:


The receiver becomes aware of the sender only when it receives a message.
SSM
Its mroute entry is (S,G).
It uses IGMPv3.
The receiver specifies the multicast addresses from which it wants to receive traffic.
ASM
Its mroute entry is (*,G) in most environments.
It uses IGMPv2.

QUESTION 6

Refer to the exhibit.



An administrator is troubleshooting Internet access issues on a customer\\'s network. After applying this ISIS configuration to R1, the administrator notices that it fails to redistribute the default route into IS-IS. After checking the connectivity between the ISIS router and the ISP router the engineer confirmed there is Layer 3 connectivity between them. Which action should be taken to correct the problem?

A. Configure R1 as a Layer 1 router

B. Add the default-information originate command to the configuration

C. onfigure the default route under any routing protocol other than IS-IS

D. Associate the default route with a VRF

Correct Answer: B

QUESTION 7

Refer to the exhibit.

A network engineer implemented this segment routing configuration. Which statement about the output is true?

A. This range conflicts with the segment routing local block range.

B. The device must be reloaded for these ranges to be allocated and used.

C. The default segment routing global block range is being used on this device.

D. A nondefault segment routing global block range is being used on this device.

Correct Answer: D

Reference: https://www.cisco.com/c/en/us/td/docs/routers/asr920/configuration/guide/segment-routing/segment-routing-book/seg-routing-global-block.html

QUESTION 8

You have configured routing policies on a Cisco IOS XR device with routing policy language. Which two statements about the routing policies are true? (Choose two.)

A. The routing policies affect BGP-related routes only.

B. If you make edits to an existing routing policy without pasting the full policy into the CLI, the previous policy is overwritten.

C. You can change an existing routing policy by editing individual statements.

D. The routing policies are implemented in a sequential manner.

E. The routing policies are implemented using route maps.

Correct Answer: CD

QUESTION 9

An engineer warns to map a multicast IP address to a multicast MAC How many bits are used to make the conversion?

A. high-order 24 bits

B. higher-order 23 bits

C. low order 23 bits

D. lower-order 24 bits

Correct Answer: C

QUESTION 10

Which command is used to enable BIDIR-PIM under global configuration mode for Cisco IOS XE Sofware?

A. ip pim bidir-enable

B. ipv4 pim bidir-enable

C. ip multicast-routing

D. ip pim bidir

Correct Answer: A

Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipmulti_pim/configuration/xe-3s/imc-pim-xe-3s-book/imc_basic_cfg.html

QUESTION 11

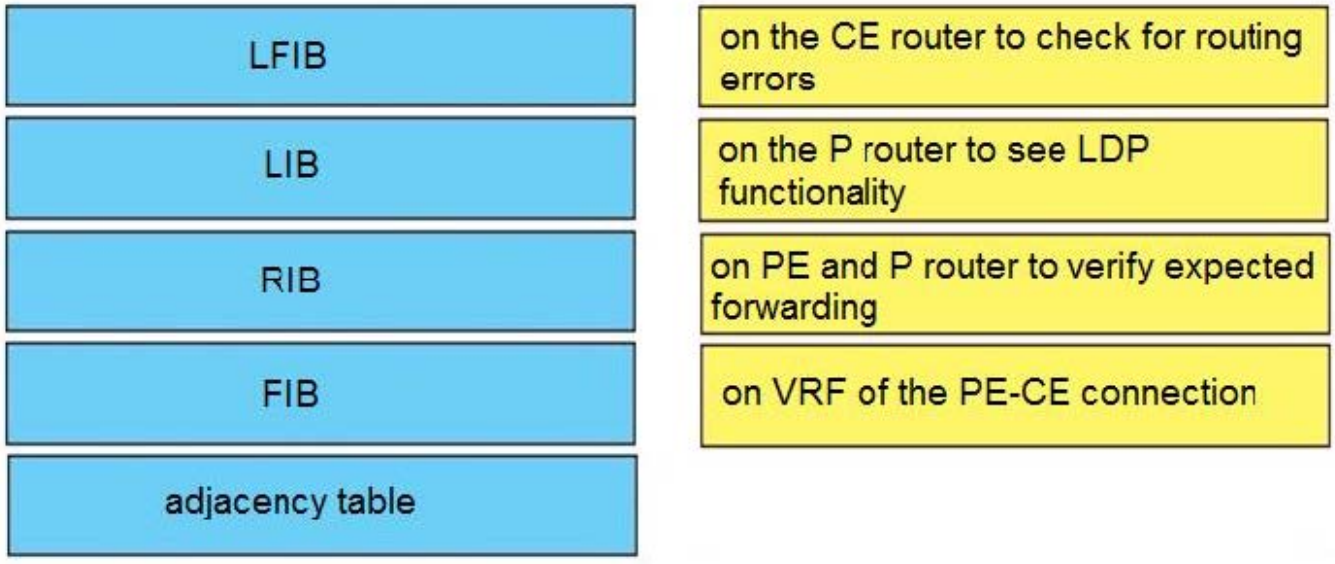
DRAG DROP

An engineer is troubleshooting end-to-end customer traffic across an MPLS VPN service provider network.

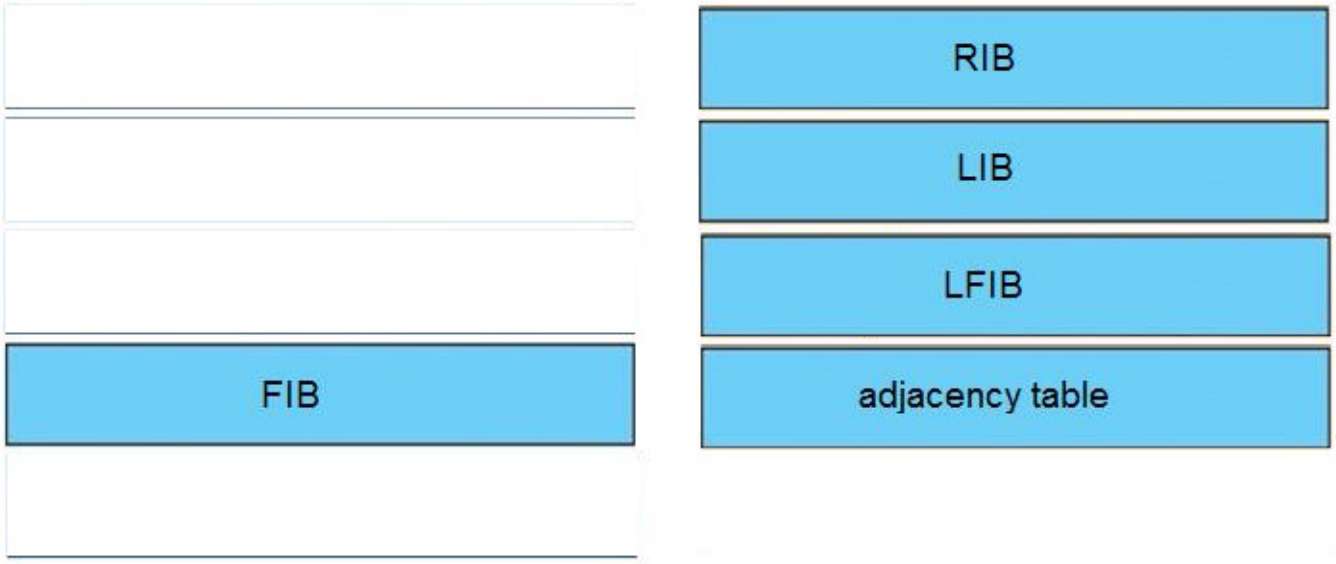
Which tasks should the engineer use to solve the routing issues?

Drag and drop the table types from the left onto the most useful troubleshooting tasks/router types on the right. (Not all options are used.)

Select and Place:



Correct Answer:



QUESTION 12

For which reason can two BGP peers fail to establish a neighbor relationship?

A. Their BGP send-community strings are misconfigured

B. Their BGP timers are mismatched

C. Their remote-as numbers are misconfigured

D. They are both activated under an IPv4 address family

Correct Answer: C

QUESTION 13

What is used by SR-TE to steer traffic through the network?

A. shortest path calculated by IGP

B. dynamic rules

C. path policy

D. explicit maps

Correct Answer: C

Reference: https://www.cisco.com/c/en/us/td/docs/routers/asr9000/software/segment-routing/configuration/guide/b-seg-routing-cg-asr9k/b-seg-routing-cg-asr9k_chapter_0100.html

QUESTION 14

Which two methods represent IPv6 tunneling implementations? (Choose two.)

A. IPv6 over GRE tunneling

B. manually configured tunnels

C. automatic tunnels

D. 6to4 tunneling

E. IPv6 over an IPv4 tunnel over MPLS

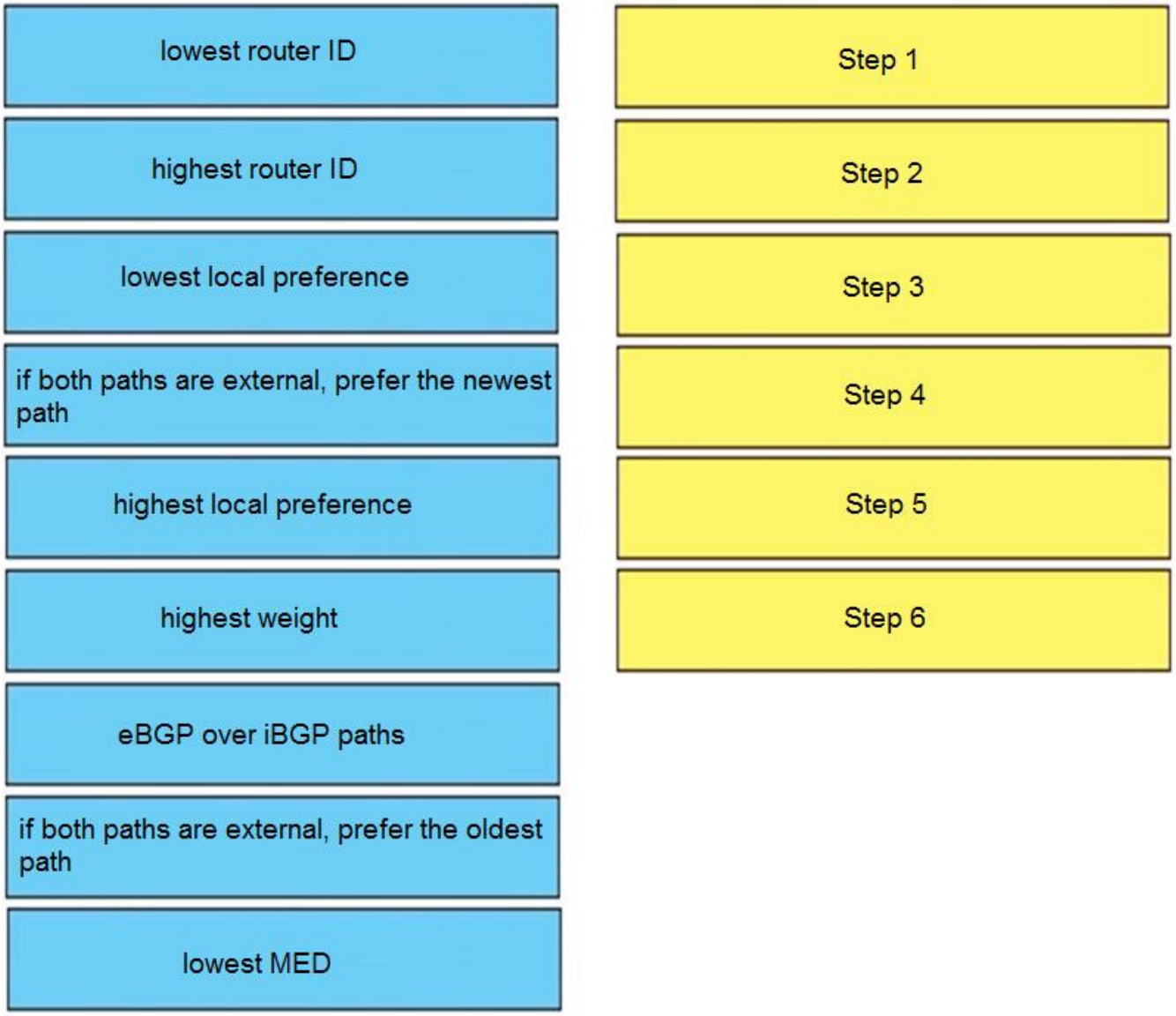
Correct Answer: BC

QUESTION 15

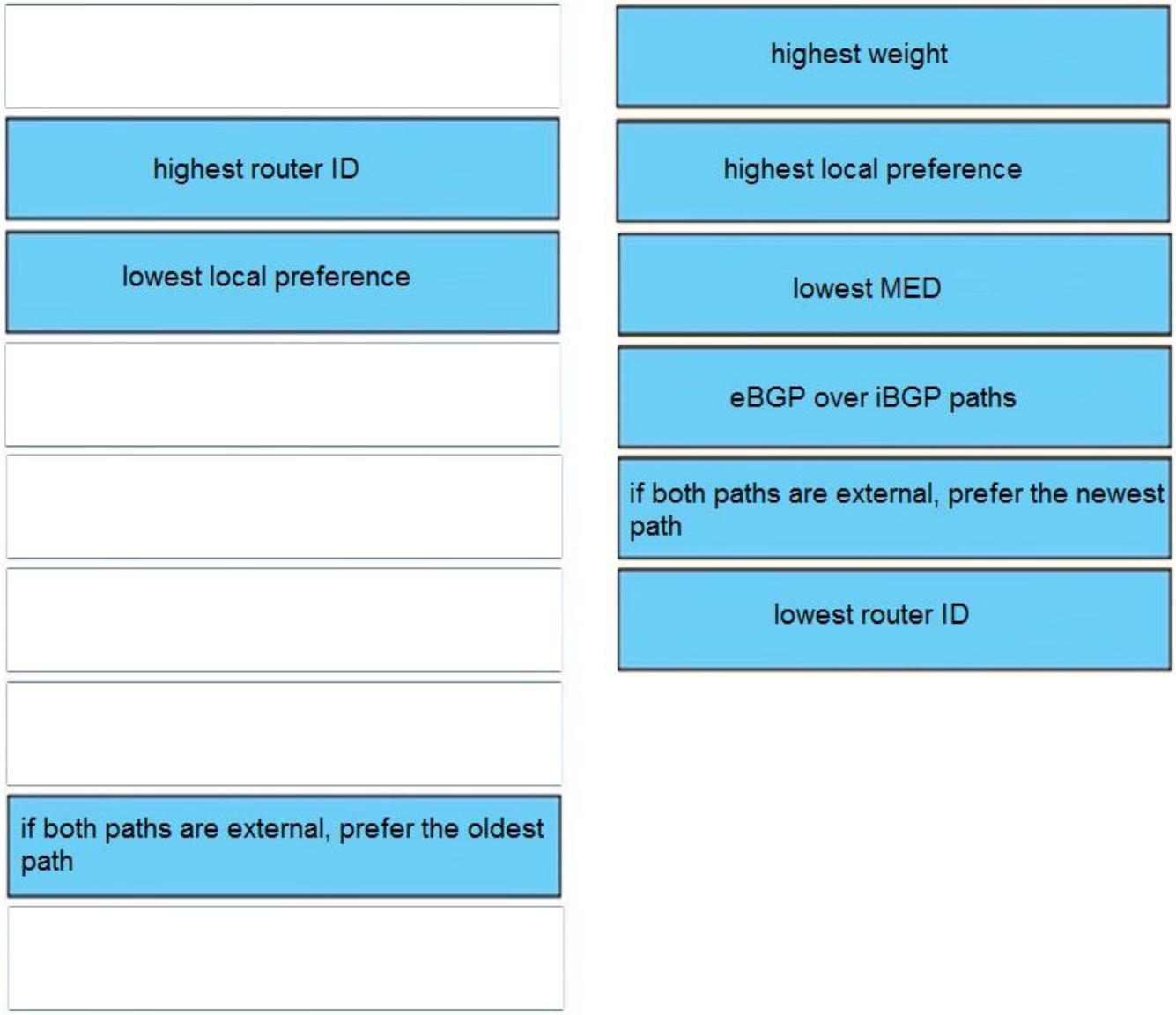
DRAG DROP

Drag and drop the attributes for the BGP route selection on the left into the correct order on the right. Not all options are used.

Select and Place:



Correct Answer:



Reference: https://www.cisco.com/c/en/us/support/docs/ip/border-gateway-protocol-bgp/13753-25.html