



Cisco

Exam Questions 300-510

Implementing Cisco Service Provider Advanced Routing Solutions (SPRI)

NEW QUESTION 1

```

R1
interface g0/0
 ip address 192.168.1.1 255.255.255.0
 ip router isis
router isis
 net 49.0022.1111.1111.1111.00
 area-password ciSCo

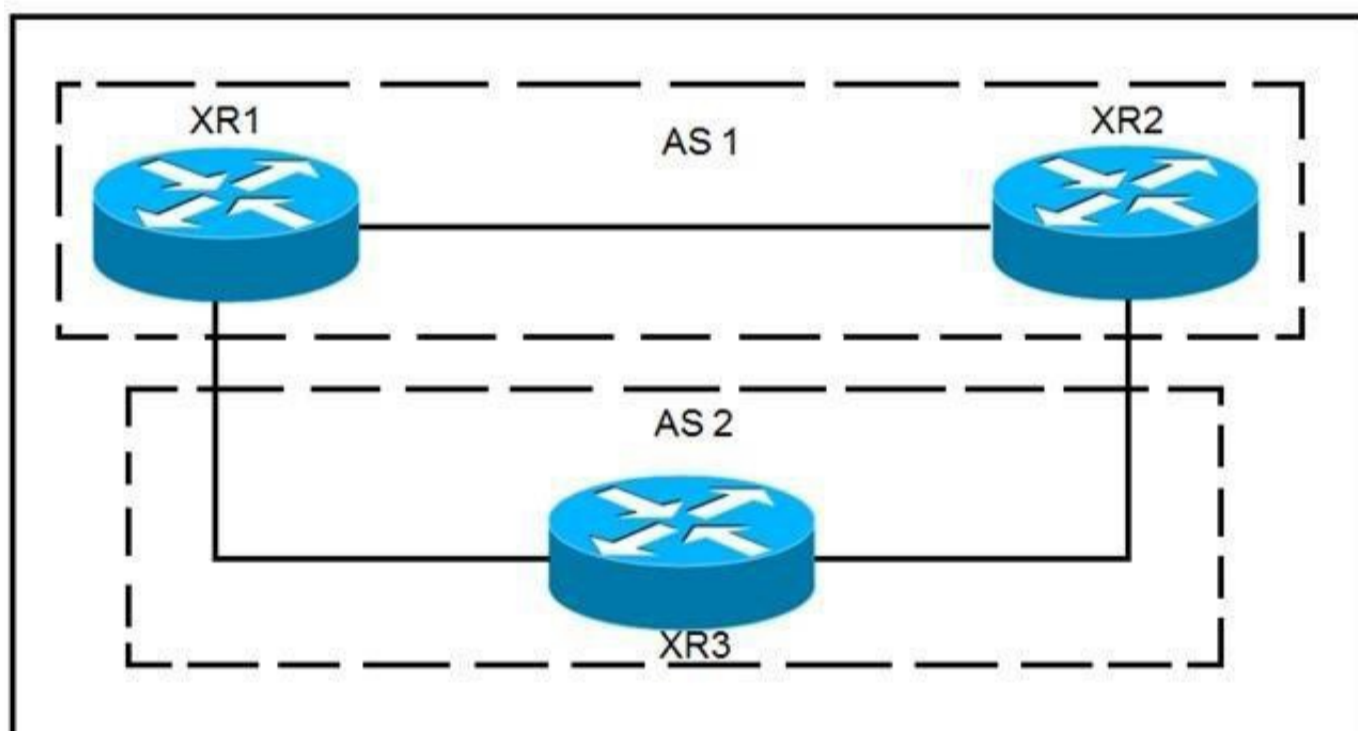
R2
interface g0/1
 ip address 192.168.1.2 255.255.255.0
 ip router isis
router isis
 net 49.0022.1111.1111.1111.00
 area-password ciSCo
  
```

Refer to the exhibit. After you applied these configurations to routers R1 and R2, the two devices could not form a neighbor relationship. Which reason for the problem is the most likely?

- A. The two routers cannot authenticate with one another.
- B. The two routers have the same area ID.
- C. The two routers have the same network ID.
- D. The two routers have different IS-types.

Answer: C

NEW QUESTION 2



Refer to the exhibit. XR1 and XR2 are sending the prefix 10.11.11.0/24 to XR3. A configured policy on XR1 is incorrectly prepending AS path 11 11 12 12 onto this prefix. A network operator wants to add a policy onto XR3 that will not allow the falsely prepending prefix from being installed. Which policy configuration applied to the XR3 neighbor configuration for XR1 can accomplish this requirement without impact to other or future received routes?

- A.

```

route-policy NO_PREPEND
 if as-path passes-through '11' then
  pass
 else
  drop
 endif
end-policy
  
```
- B.

```

route-policy NO_PREPEND
 if as-path prepends
  drop
 else
  pass
 endif
end-policy
  
```
- C.

```
route-policy NO_PREPEND
if as-path passes-through '1' then
pass
else
drop
endif
end-policy
```

- C. route-policy NO_PREPEND
 if as-path passes-through '11' then
 drop
 else
 pass
 endif
 end-policy

Answer: D

NEW QUESTION 3

Router 1:

```
interface TenGigE0/1
point-to-point
address-family ipv4 unicast
fast-reroute per-prefix
Fast-reroute per-prefix ti-lfa
```

R1#show isis fast-reroute 172.16.200.9/32

```
L2 172.16.200.9/32 [30/115]
via 192.168.20.1, TenGigE0/1, R2, SRGB Base: 16000, Weight: 0
FRR backup via 192.168.30.1, TenGigE0/2, R3, SRGB Base: 16000,
Weight: 0, Metric 40
```

Refer to the exhibit. Router 1 is connected to router 2 on interface TenGigE0/1. Which interface provides the alternate path to 172.16.200.9/32 when the link between router 1 and router 2 goes down?

- A. TenGigE0/1 interface provides the alternate path
- B. A backup path must be statically installed
- C. TenGigE0/2 interface provides the alternate path
- D. A primary path must be manually installed

Answer: C

NEW QUESTION 4

Router 1:

```
interface tunnel-te12
ipv4 unnumbered loopback0
autoroute announce
destination 192.168.1.2
path-option 12 dynamic segment-routing
path-protection
```

Refer to the exhibit. Router 1 has established an SR-TE tunnel with router 2. Which statement describes this configuration?

- A. Router 1 has a list of labels used to explicitly lay out a path to router 2.
- B. Router 1 and router 2 have a bidirectional tunnel set up with dynamic path selection.
- C. Router 1 is the head-end tunnel and has dynamically chosen a path to router 2.
- D. Router 2 is the head-end tunnel and has explicitly set a path to router 1.

Answer: C

NEW QUESTION 5

Which two conditions must be met before separate ISPs can provide interdomain multicast routing? (Choose two.)

- A. Each ISP must configure MSDP to connect its individual multicast administrative domain to the domains at other ISPs.
- B. Each ISP must dedicate a single router to handle multicast traffic between providers.
- C. Each ISP must replace its RP assignment with a global RP.
- D. Each ISP must configure its network to use PIM-DM.
- E. Each ISP must support intradomain multicast routing.

Answer: AE

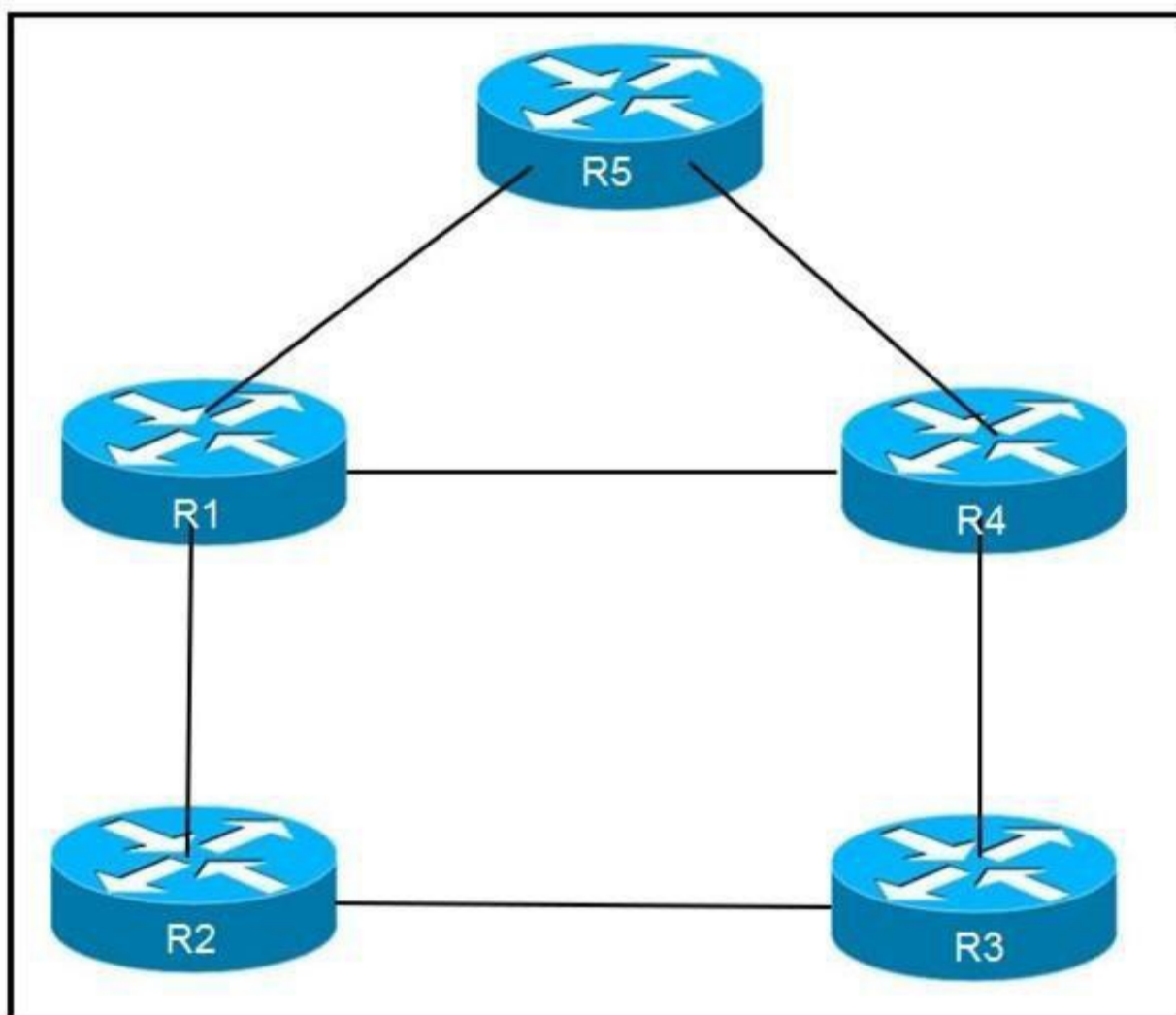
NEW QUESTION 6

You have configured MSDP peering between two autonomous systems that pass traffic between two sites, but the peering has failed to come up. Which task do you perform to begin troubleshooting the problem?

- A. Verify that multicast has been disabled globally
- B. Verify that PIM-DM is configured on the source interface
- C. Verify that both source interfaces are reachable from both peers
- D. Verify that the two MSDP peers allow asymmetric routing

Answer: C

NEW QUESTION 7



Refer to the exhibit. An engineer is addressing an IS-IS design issue which is running within the topology. All links are running on FastEthernet, except the link between R5 and R4, which is Gigabit Ethernet. Which statement about the design is true?

- A. R4 prefer to reach R5 using R1 as the next hop
- B. All links have equal cost if the default metric is used
- C. R5 prefers to use R4 as the next hop for all routes
- D. R1 prefer to use R5 as the next hop to reach R4

Answer: B

NEW QUESTION 8

After you change the IP address on an IOS XR router, you cannot ping the new address. Which step did you forget to complete?

- A. commit the configuration
- B. roll back the configuration
- C. merge the configuration
- D. save the running configuration

Answer: A

NEW QUESTION 9

Which two statements about mapping multicast IP addresses to MAC addresses are true? (Choose two.)

- A. All mapped multicast MAC addresses begin with 0x0100.5E
- B. The router performs the mapping before it hands the packet off to a switch
- C. All multicast MAC addresses end with 0x0100.5E
- D. The mapping process may generate overlapping addresses, which can cause receivers to receive unwanted packets

E. All destination MAC addresses begin with an octet of binary 1s

Answer: AD

NEW QUESTION 10

Refer to the exhibit. Which task must you perform on interface g1/0/0 to complete the SSM implementation?

- A. configure OSPFv3
- B. enable CDP
- C. disable IGMP
- D. configure IGMPv3

Answer: D

NEW QUESTION 10

```
Router 1:
router ospf 20
 redistribute eigrp 1
 network 192.168.0.0 0.0.0.255 area 0
```

Refer to the exhibit. An engineer is troubleshooting an OSPF issue. Router 1 has a neighbor relationship with router 2. Only router 1 classful EIGRP routes can be seen on router 2. In order for all EIGRP routes to be redistributed correctly, which action should be taken?

- A. Router 1 must have the keyword subnets included in the redistribution command for all EIGRP routes to be redistributed.
- B. Router 1 must remove the AS number 1 from the redistribution command for all EIGRP routes to be redistributed.
- C. Router 1 must have the keyword ospf-metric included in the redistribution command for all EIGRP routes to be redistributed.
- D. Router 1 must have the keyword metric-type 1 included in the redistribution command for all EIGRP routes to be redistributed.

Answer: A

NEW QUESTION 13

Refer to the exhibit. CE1 and CE2 cannot communicate through the service provider BGP peering is established between PE1 and PE2. IS-IS is the only routing protocol running in the service provider core. What step can be done to troubleshoot the issue?

- A. Switch the IGPs running in the core from IS-IS to OSPF to support a Cisco MPLS TE tunnel from PE1 to PE2.
- B. Configure BGP between CE and PE routers.
- C. Confirm that IS-IS is running with metric-style narrow.
- D. Verify the MPLS LSPs.

Answer: C

NEW QUESTION 17

Which output from the show isis interface command helps an engineer troubleshoot an IS-IS adjacency problem on a Cisco IOS-XR platform?

- A. metric
- B. priority
- C. circuit type
- D. hello interval

Answer: D

NEW QUESTION 19

A network engineer is troubleshooting OSPF multiarea. Which Cisco IOS XR feature should the engineer use in order to streamline OSPF issue?

- A. hierarchical CLI
- B. DR support for topology management
- C. routing process enabled by default on all interfaces
- D. show ip ospf topology command

Answer: A

NEW QUESTION 21

Which two routing protocols have extensions capable of running SRv6? (Choose two.)

- A. OSPF
- B. BGP
- C. RIP
- D. IGRP
- E. EIGRP

Answer: AB

NEW QUESTION 23

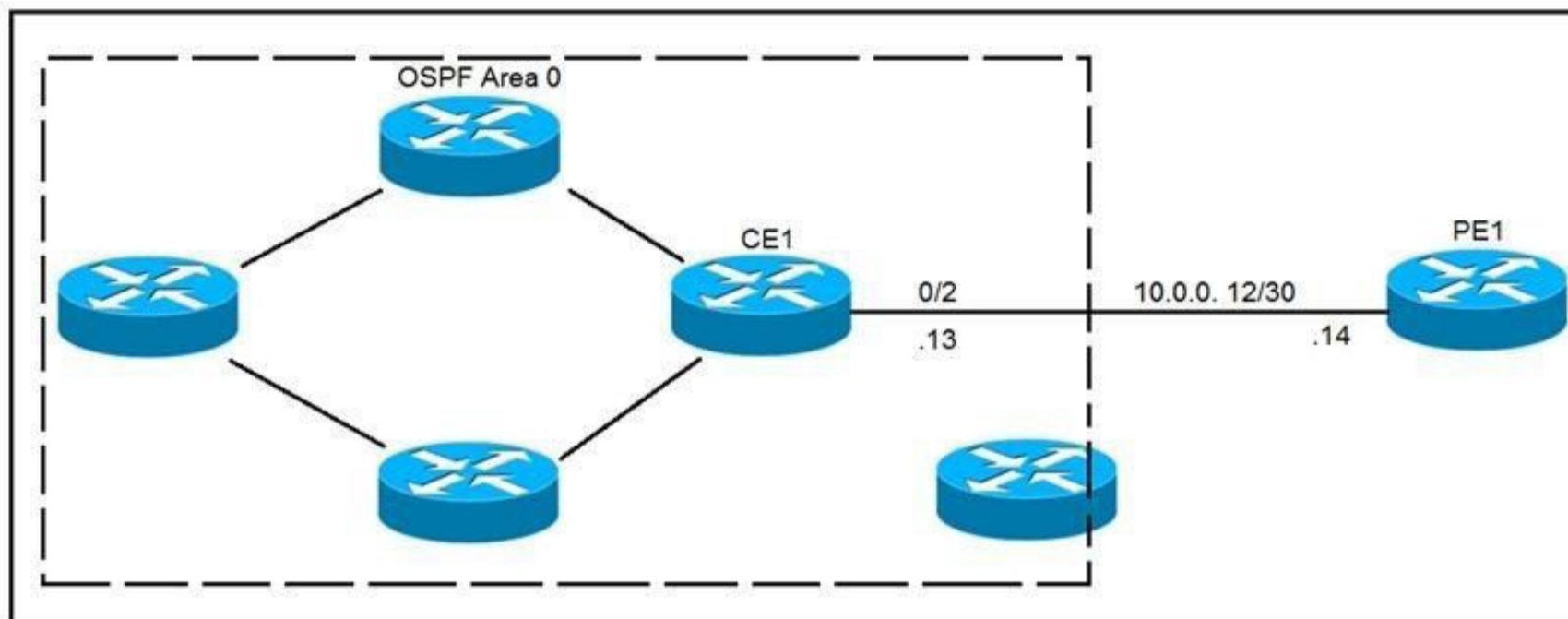
DRAG DROP

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:

- A. Mastered
- B. Not Mastered

Answer: A

NEW QUESTION 25



Refer to the exhibit. CE1 is the gateway router into the provider network via PE1. A network operator must inject a default route into OSPF area 0. All devices inside area 0 must be able to reach PE1. Which configuration achieves this goal?

- A.

```
#CE1
router ospf 1
default-information originate always
```
- B.

```
#CE1
ip route 0.0.0.0 0.0.0.0 GigabitEthernet0/2 10.0.0.14
!
router ospf 1
default-information originate
```

Answer: B

NEW QUESTION 30

Refer to the exhibit. Which attribute can router 1 alter so that only other iBGP peers prefer to use 192.168.4.2 as the next hop for route 192.168.3.0/24?

- A. MED
- B. local preference
- C. origin
- D. weight

Answer: A

NEW QUESTION 34

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