

## CCIE R&S Core Knowledge Question(1)

1. Which LSA type is flooded throughout the autonomous system by an Area Border Router and contains an AS Boundary Router address? Highlight for answer: Type-4 LSA (ASBR Summary) 2. R1#ping FE80::2 Output Interface: Serial1/0 Type escape sequence to abort. Sending 5, 100-byte ICMP Echos to FE80::2, timeout is 2 seconds: Packet sent with a source address of FE80::5 !!!!! Success rate is 100 percent (5/5), round-trip min/avg/max = 8/8/12 ms Why must you specify an output interface when pinging FE80::2? **Highlight for answer:** FE80::2 is an IPv6 link-local address.&#160; IPv6 link-local address does not need to be unique on a router, but must be unique on an interface.&#160; 3. Which process uses ICMP messages and solicited-node multicast addresses to determine the link-layer address of a neighbor on the same network (local link), verify the reachability of a neighbor, and track neighboring routers? Highlight for answer: The IPv6 neighbor discovery process. 4. Which OSPF network type is ideal for partially meshed NBMA networks because it is easy to configure(requires no configuration of neighbor commands), consumes only one IP subnet, and requires no designated router election? Highlight for answer: Point-to-multipoint 5. Which Cisco OSPF feature allows you to detect lost neighbors within one second even when neighbor loss might not be detected the the OSI physical and data-link layers? Highlight for answer: OSPF Fast Hello Packets