Which of these devices has a routing capability?

a.Hub

b.Layer 2 switch

c.Layer 3 switch

d.Bridge

Which of these generic routing protocol types will most likely choose a route that goes through the least number of routers?

a.Path vector

b.Link state

c.Spanning tree

d.Distance vector

3.Which of these routing protocols is a distance vector protocol?

a.RIP

b.OSPF

c.IS-IS

d.BGP

Which protocol routes between autonomous systems?

a) OSPF

b) IS-IS

c) EGP

d) IGRP

Which of these network addresses would represent the default route on a Windows device?

a) 127.0.0.0

b) 0.0.0.0

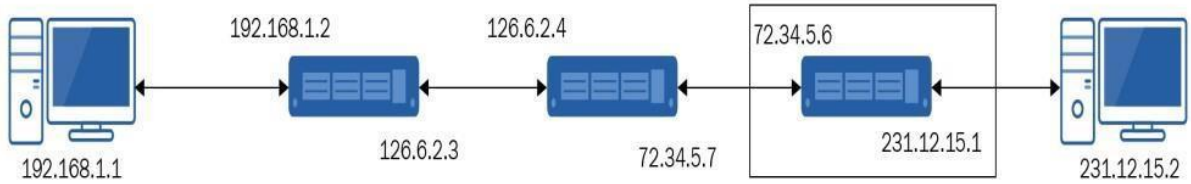
c) 255.255.255.255

d) 10.20.32.0

What feature prevents data from flowing between networks forever?

a) RIP
b) TTL
c) STP
d) OSPF

Assuming only the router selected on the right uses NAT, the translation takes place on the interface with the IP address 72.34.5.6. If the web server at 231.12.15.2 sends data to the PC at 192.168.1.1, what would the source IP address be on the data that the PC receives?



Choose the correct answer:

a) 231.12.15.2
b) 231.12.15.1
c) 72.34.5.6
d) 192.168.1.2

Which function allows for different types of data to be prioritized?

a. QoS

b. NAT

c. DHCP

d. EIGRP

e. Wireless bridge

Using packet tracer setup, the following topologies using a switch and devices:

A server
- **2 Wi-Fi routers connected to the server**
- **4 desktops connected to each router**
- **Each network must be able to ping one another**

Equipment:

- **1 Server**
- **2 Wi-Fi Routers**
- **8 Desktops (4 connected to each router)**

Configuration:

1. **Server Setup:**
    - **Connect the server to both Wi-Fi routers, preferably using Ethernet cables for reliability.**
    - **Assign the server a static IP address for ease of management. For example:**
        - Router 1: 192.168.1.1 (Gateway)
        - Server IP on Router 1: 192.168.1.10
        - Router 2: 192.168.2.1 (Gateway)
        - Server IP on Router 2: 192.168.2.10
2. **Router Setup:**
    - Ensure that both routers are set up in different subnets (e.g., 192.168.1.0/24 for Router 1 and 192.168.2.0/24 for Router 2) to avoid IP conflicts.
    - Disable DHCP on one of the routers if necessary, or set up routing to allow communication between different subnets.
3. **Desktop Setup:**
    - Connect 4 desktops to each router, either via Ethernet or Wi-Fi.
    - Ensure each desktop has a unique IP address within the router's subnet.
4. **Routing Setup:**
    - Configure routing between the two subnets. This can be done on the server or the routers, depending on the equipment's capabilities. Enable static routes or use routing protocols like RIP or OSPF if supported.
    - Example route on Router 1 to access Router 2's network:
        - Destination: 192.168.2.0/24
        - Gateway: 192.168.1.10 (Server IP on Router 1)
    - Similarly, set up a route on Router 2 to access Router 1's network.
5. **Testing the Network:**
    - Once configured, you can test the connectivity by pinging devices on the other network.

- From any desktop on Router 1's network (e.g., 192.168.1.2), try to ping a desktop on Router 2's network (e.g., 192.168.2.2).
- If the ping is successful, then the routing between the networks is correctly configured.

This setup ensures that all devices, despite being on different routers and subnets, can communicate with one another.