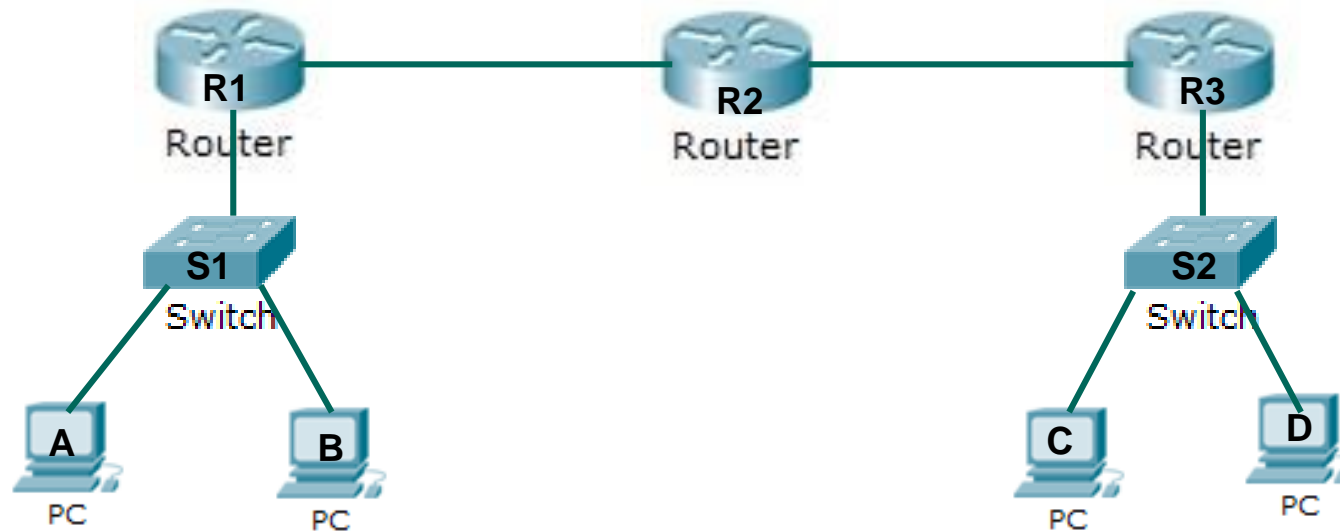


WEEK 9 REVIEW



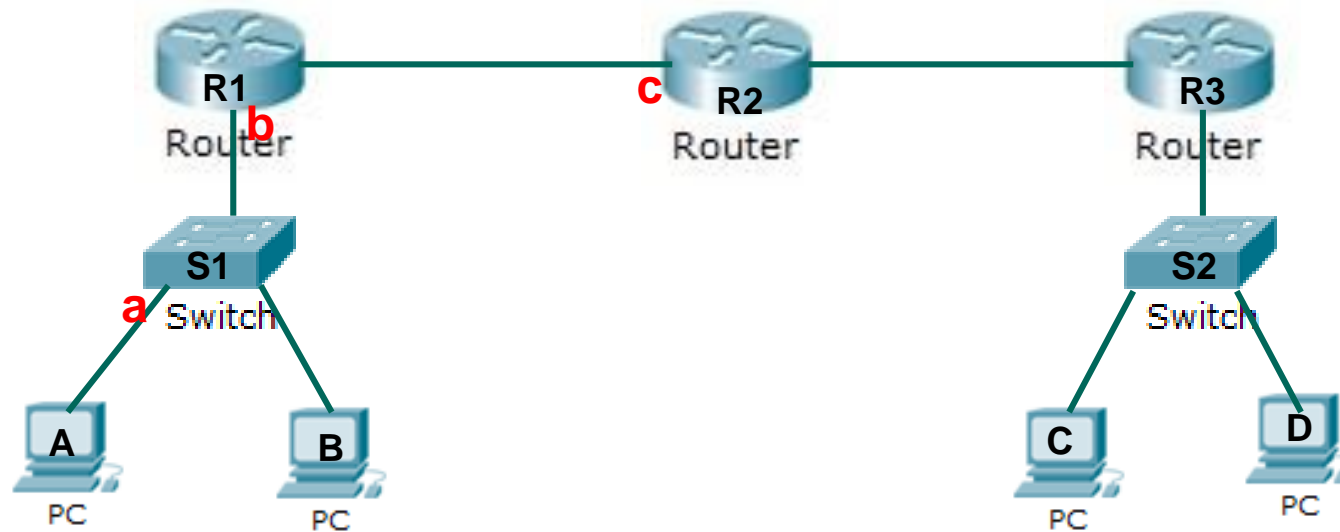


1. A packet is sent from PC-A to PC-D. How many Ethernet encapsulations are required?

- A) 4
- B) 5
- C) 6
- D) 7

Answer in last slide



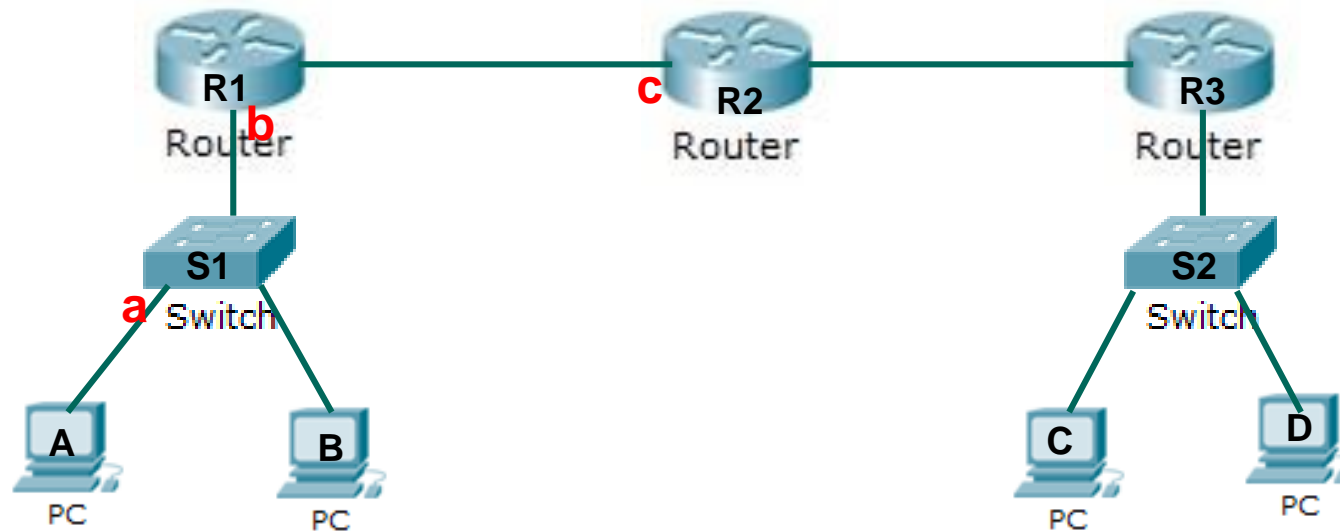


2. A packet is sent from PC-A to PC-B. Which gateway does PC-A use?

- A) Interface c
- B) Interface a
- C) Interface b
- D) none

Answer in last slide



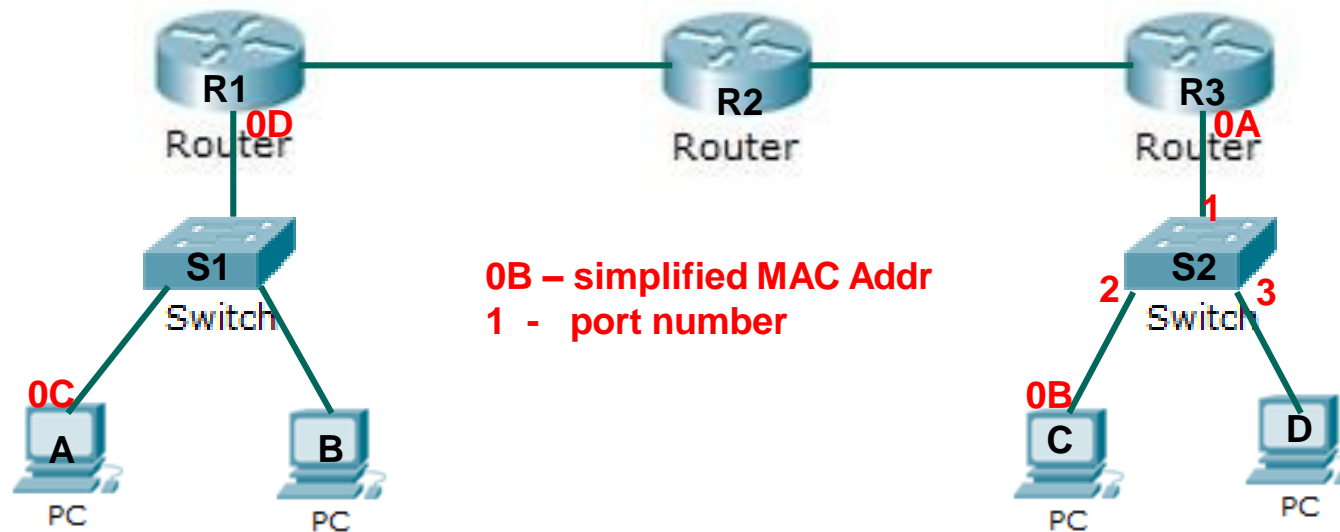


3. A packet is sent from PC-A to PC-C. Which gateway does PC-A use?

- A) Interface c
- B) Interface a
- C) Interface b
- D) none

Answer in last slide



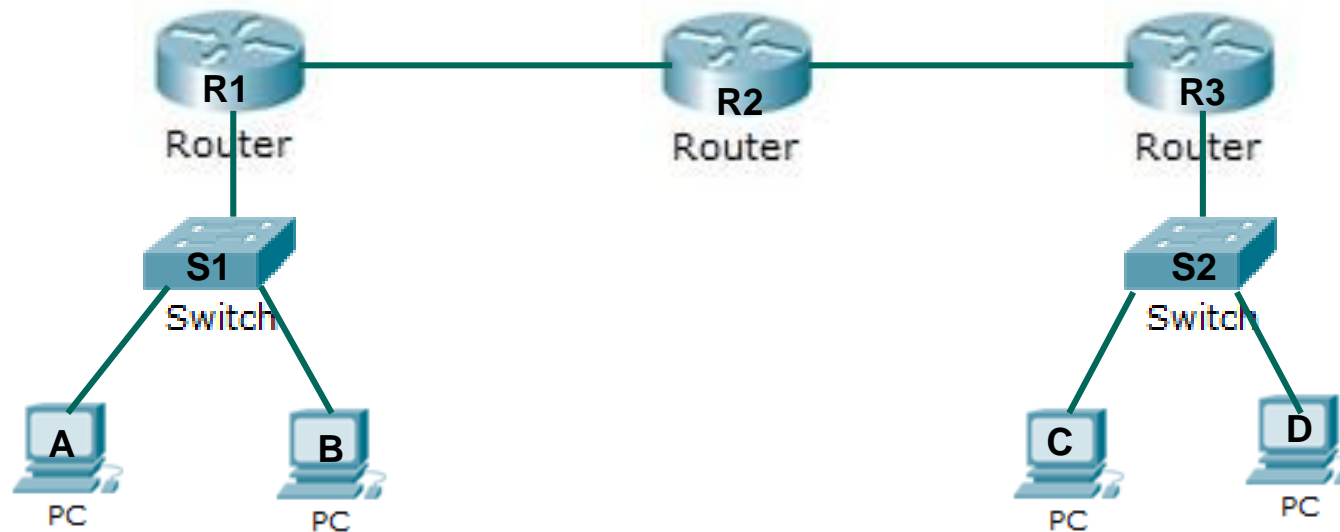


4. The MAC Address Tables of the Switches are empty. A packet is sent from PC-A to PC-C. Which MAC address table information is now populated in S2?

- A) 0A, port 1
- B) 0C, port 1
- C) 0B, port 2
- D) 0D, port 1

Answer in last slide



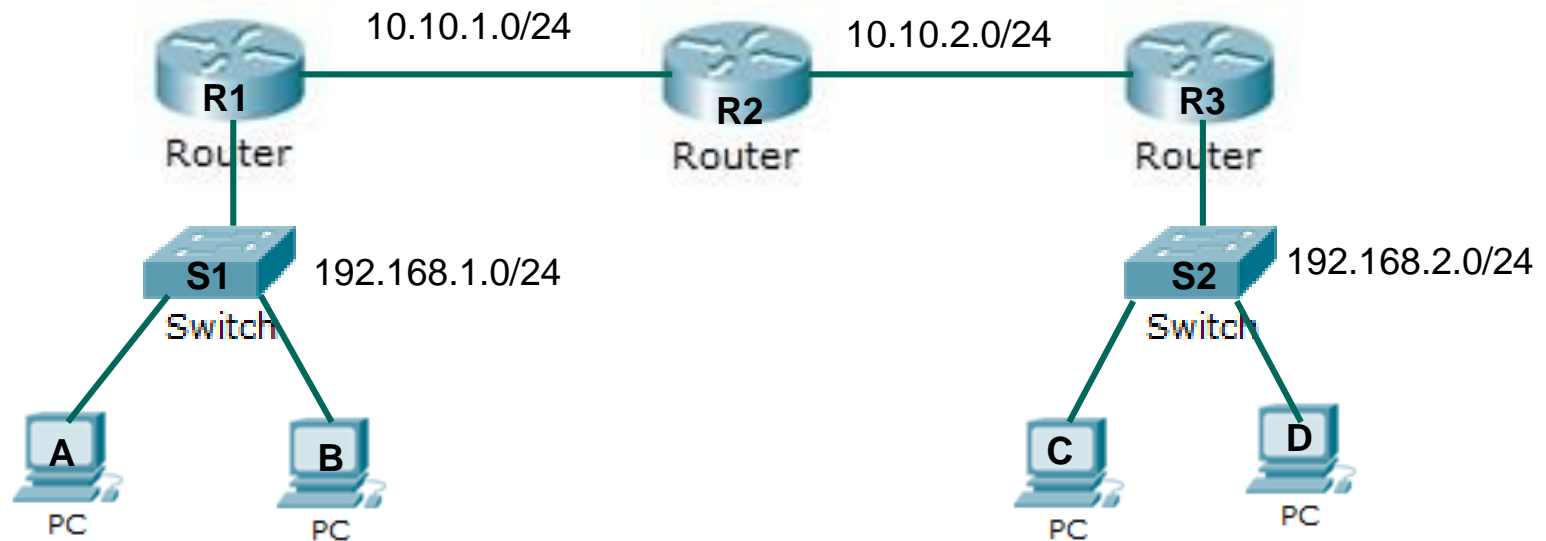


5. A packet needs to be sent from PC-A to PC-C. Which Routers require a static route?

- A) R1, R3
- B) R1, R2
- C) R1, R2, R3
- D) R2, R3

Answer in last slide



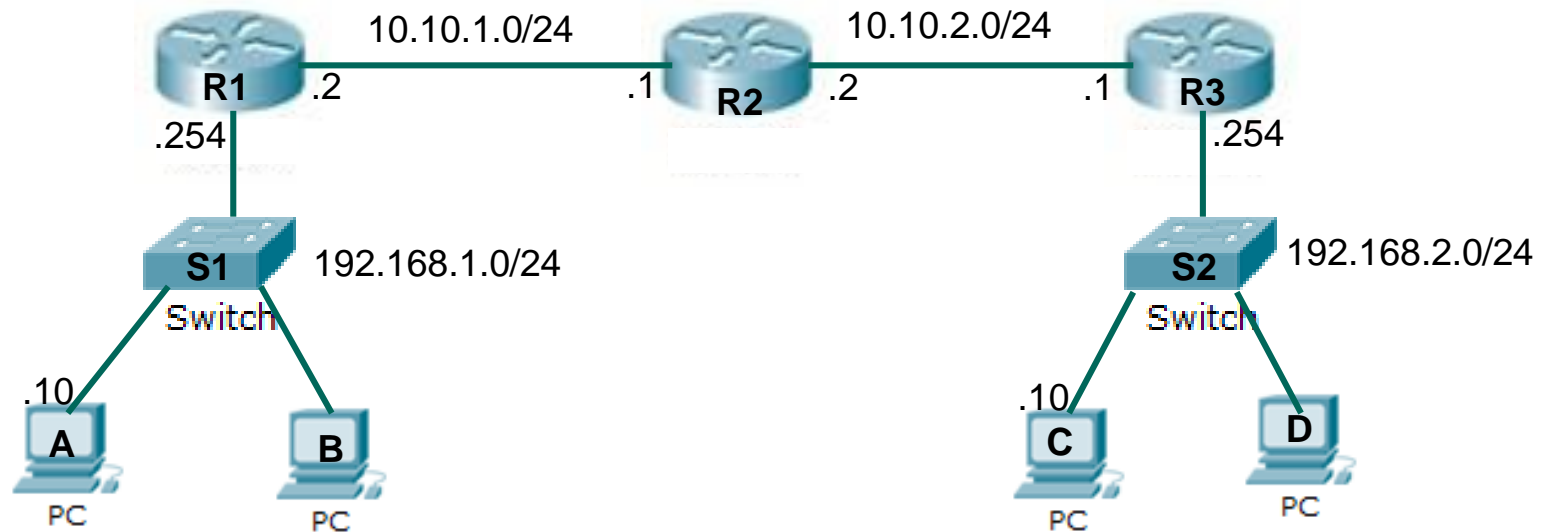


6. The network is configured with the subnet addresses shown. Which IP address is valid for the S1 port?

- A) 192.168.1.255
- B) 192.168.1.0
- C) 192.168.1.25
- D) none of the above

Answer in last slide





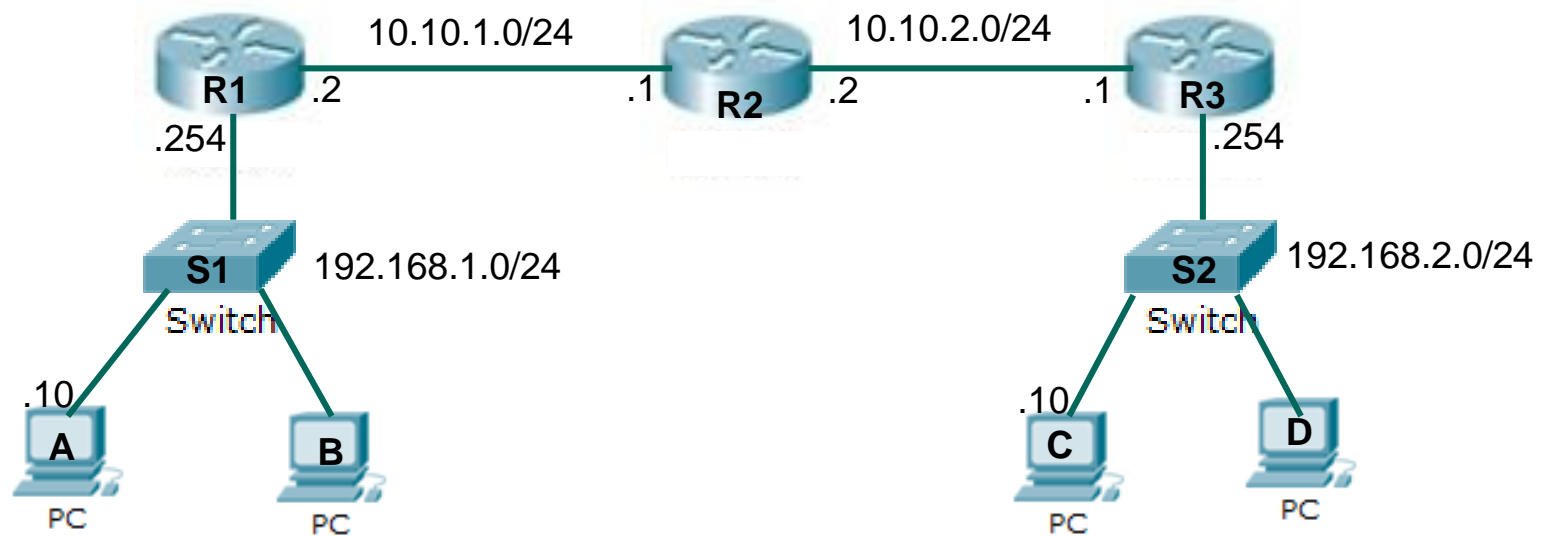
7. A packet needs to be sent from PC-A to PC-C. Which static route needs to be configured at R1?

- A) 192.168.2.0/24; 10.10.1.2
- B) 192.168.1.0/24; 10.10.1.1
- C) 192.168.2.0/24; 10.10.1.1
- D) 192.168.2.0/24; 10.10.2.2

Static Route = Dest Network; Next Hop Address

Answer in last slide



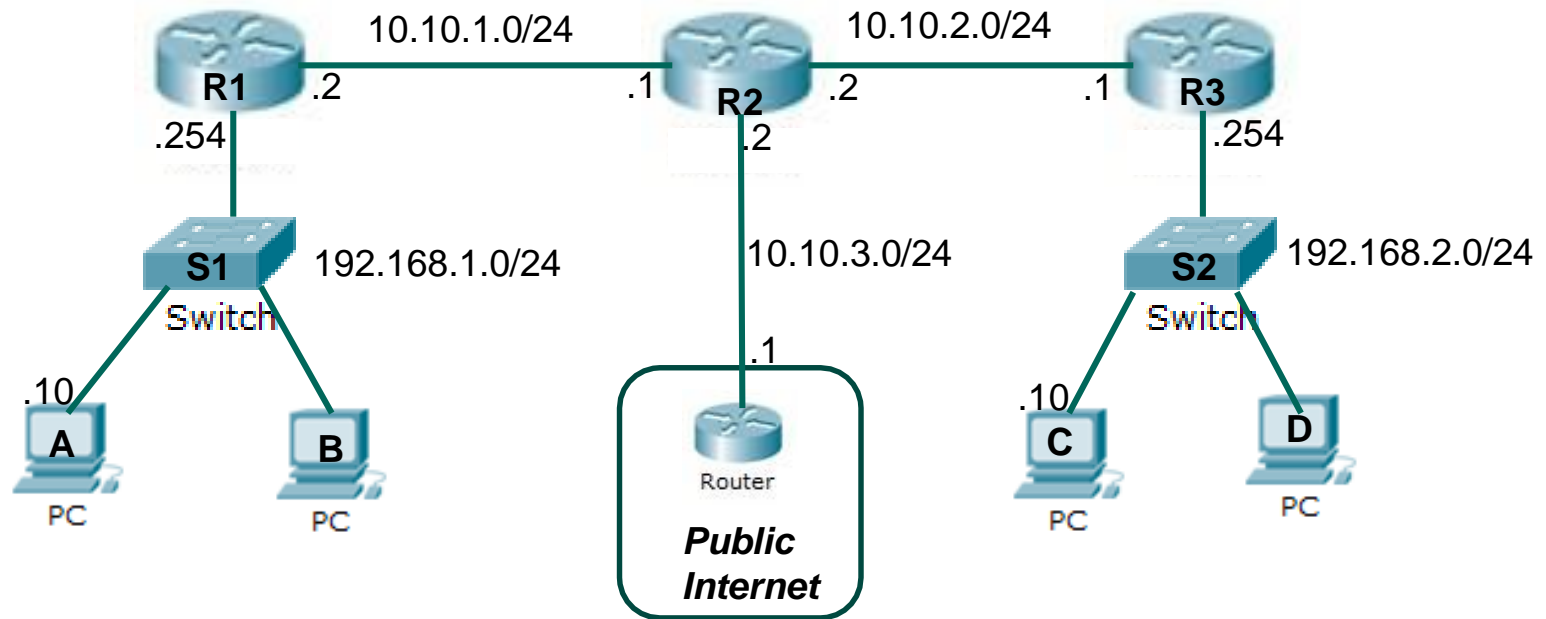


8. What default gateway should be configured at PC-A?

- A) none
- B) 192.168.1.254
- C) 192.168.2.254
- D) 10.10.1.2

Answer in last slide





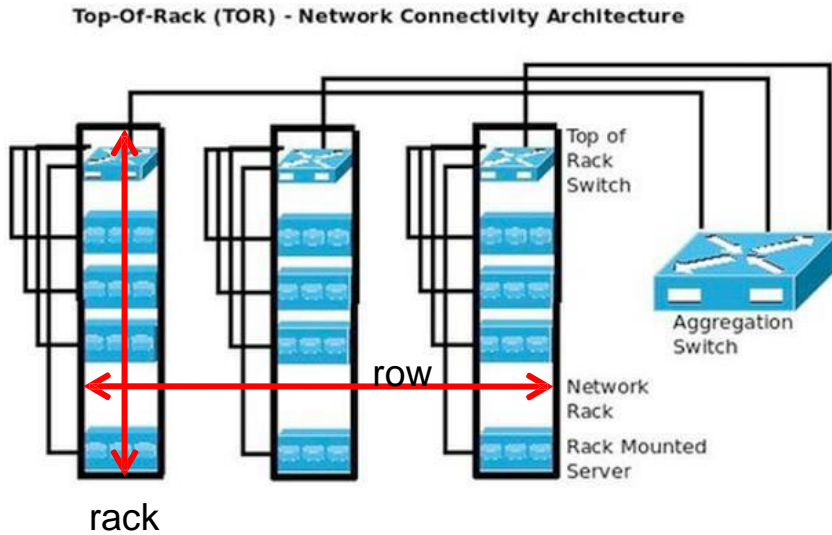
9. A default route is configured at R3? Which one is the most logical to use.

- A) 10.10.2.2
- B) 10.10.3.1
- C) 192.168.2.254
- D) Default routes are only configured on end devices

Answer in last slide

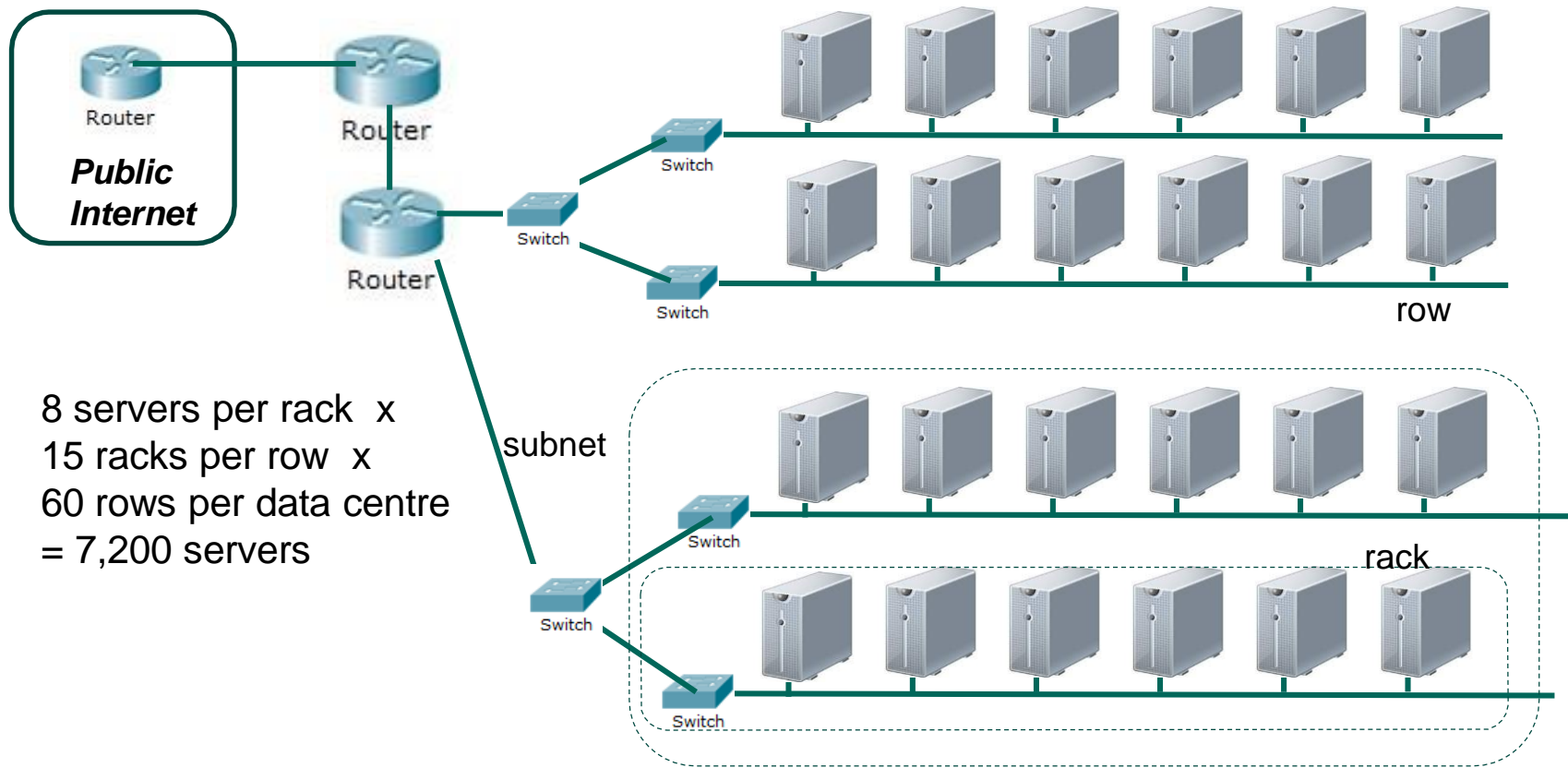


Data Centre Design



Number of Servers = servers per rack x racks per row x rows per DC





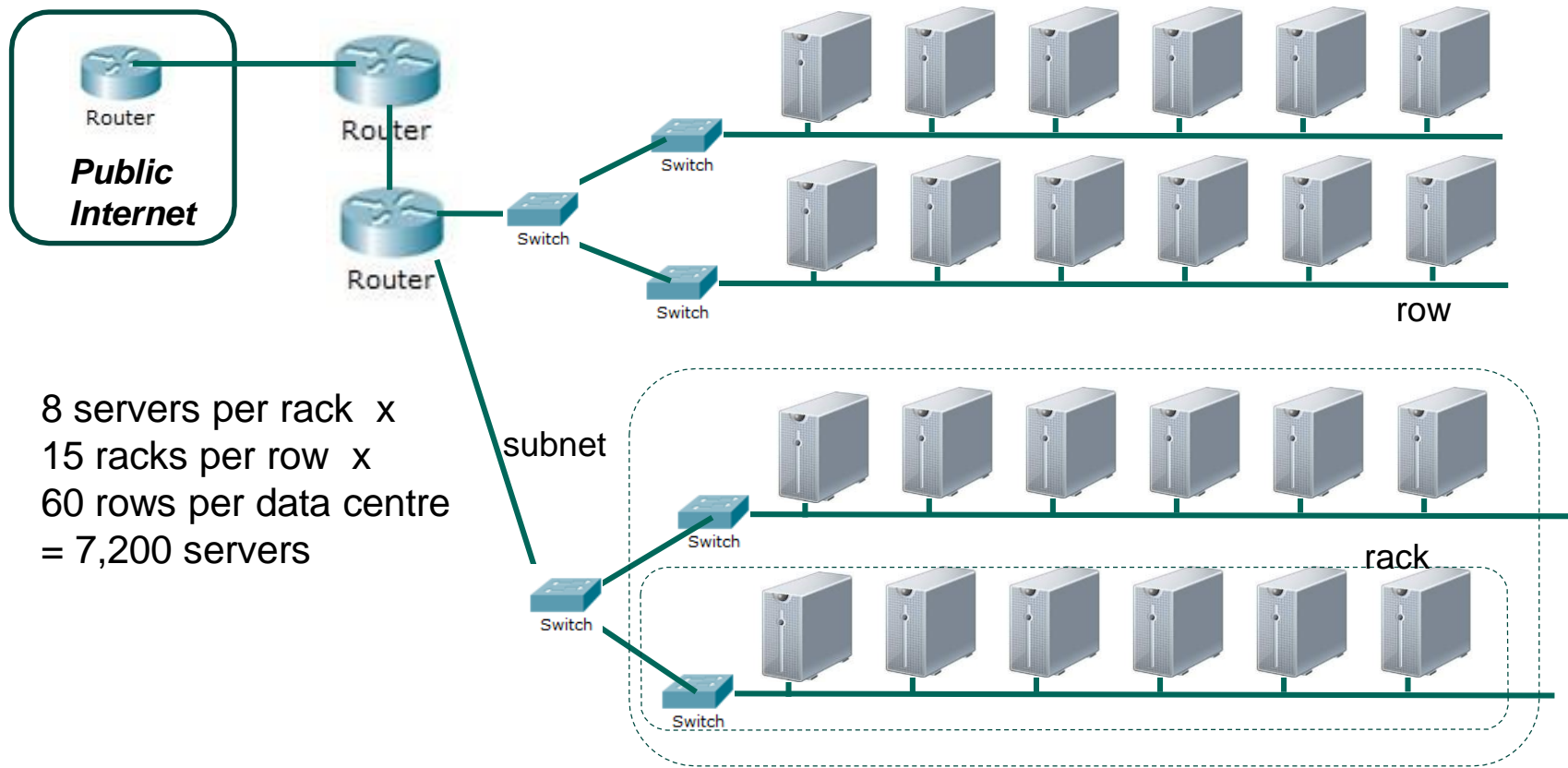
8 servers per rack x
15 racks per row x
60 rows per data centre
= 7,200 servers

10. The data centre has been assigned the address 172.20.192.0/19. The full address space must be used. Each row is assigned its own subnet. What is the row subnet?

- A) 172.20.192.0/24
- B) 172.20.192.0/26
- C) 172.20.192.0/25
- D) 172.20.192.0/27

Answer in last slide





8 servers per rack x
15 racks per row x
60 rows per data centre
= 7,200 servers

11. If row n is assigned subnet n, what is the third row subnet?

- A) 172.20.195.0/25
- B) 172.20.192.123/25
- C) 172.20.193.128/25
- D) 172.20.192.224/25

Answer in last slide



12. If the third row subnet is 172.20.193.128/25, what are the first and last addresses?

- A) 172.20.193.129/25 & 172.20.193.255/25
- B) 172.20.193.129/25 & 172.20.193.240/25
- C) 172.20.193.129/25 & 172.20.194.0/25
- D) 172.20.193.129/25 & 172.20.193.254/25

Answer in last slide



Answers

1A

2 D

3 C

4 A

5 B

6 D

7 C

8 B

9A

10 C

11 C

12 D

