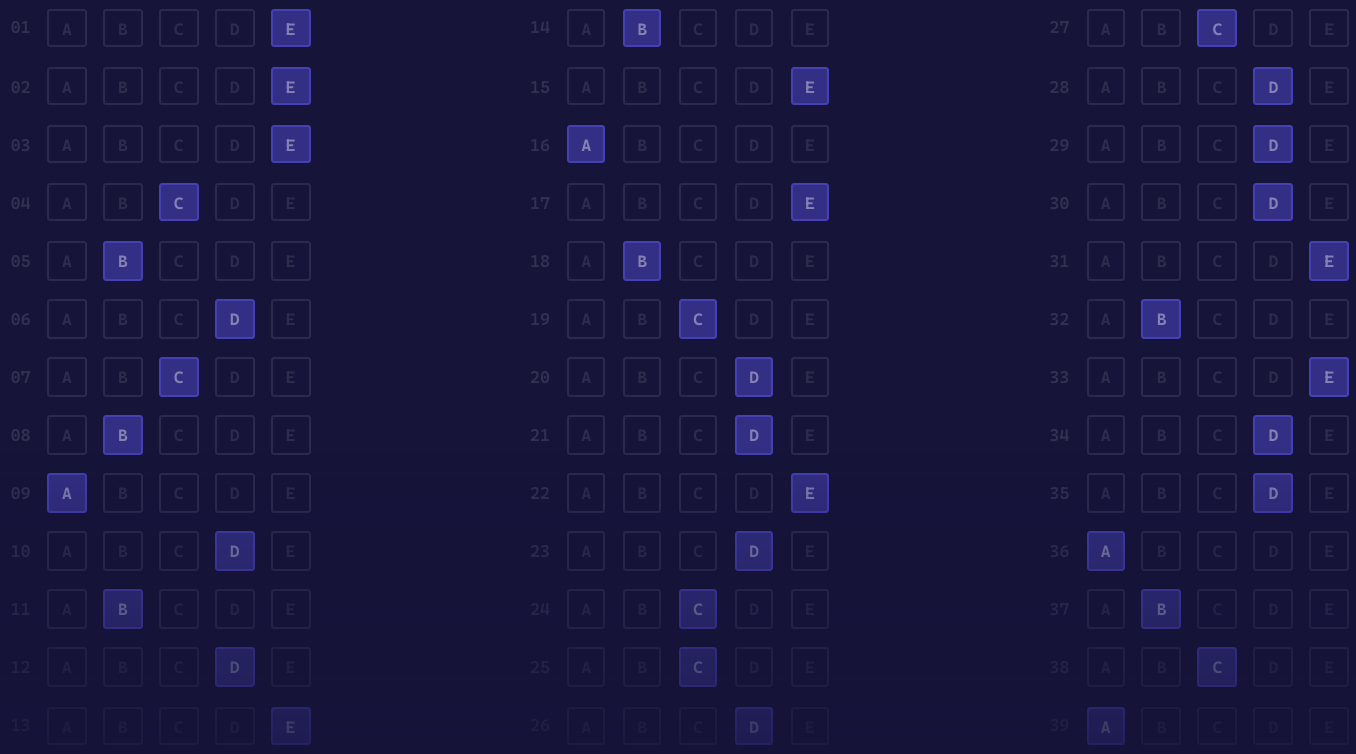
MOMETRIX
SMARTER PREP. BETTER RESULTS.




PRACTICE QUESTIONS

CompTIA

# N10-009

CompTIA Network+ Certification Exam

| EDITION | QUESTIONS | ISSUED |
| --- | --- | --- |
| Demo | 9 | August 12, 2026 |

WEB www.mometrix.net

SUPPORT support@mometrix.net

# Before you begin

## What this is

9 practice questions for CompTIA `N10-009`, each with its answer key and an explanation. Answer a question before you read its key — the explanation is worth more once you have committed.

## If something looks wrong

Send us three things and we will check it:

- the exam code, `N10-009`
- the question number
- the email address on your order

Write to **support@mometrix.net**. We reply within one business day.

## Licence

**QUESTION 1** MULTIPLE CHOICE

A network administrator needs to allow SSH and HTTPS traffic through a corporate firewall. Which of the following port numbers should be opened? (Choose two.)

**A** **22**

B 23

C 80

**D** **443**

ANSWER **A** · **D**

WHY SSH (Secure Shell) uses TCP port 22 and HTTPS (HTTP Secure) uses TCP port 443. Port 23 is used for Telnet, an insecure remote access protocol, and port 80 is used for unencrypted HTTP traffic. The administrator must open ports 22 and 443 to permit SSH and HTTPS traffic respectively.

**QUESTION 2** MULTIPLE CHOICE

Which of the following are valid differences between IPv4 and IPv6? (Choose two.)

**A** **IPv6 uses a 128-bit address space**

B IPv6 uses ARP for address resolution

**C** **IPv6 supports Stateless Address Autoconfiguration (SLAAC)**

D IPv6 uses broadcast for one-to-many communication

ANSWER **A** · **C**

WHY IPv6 uses a 128-bit address space compared to IPv4's 32-bit space and supports SLAAC for automatic address configuration. IPv6 does not use ARP; it uses Neighbor Discovery Protocol (NDP) for address resolution. IPv6 also does not use broadcast; it uses multicast for one-to-many communication.

**QUESTION 3** SINGLE CHOICE

At which layer of the OSI model does a router primarily operate?

A Layer 1 (Physical)

B Layer 2 (Data Link)

**C Layer 3 (Network)**

D Layer 4 (Transport)

**ANSWER C**

**WHY** Routers operate primarily at Layer 3 (Network layer) of the OSI model. They use IP addresses to make forwarding decisions and route packets between different networks. Layer 1 devices include hubs and repeaters, Layer 2 devices include switches and bridges, and Layer 4 devices operate at the transport level.

**QUESTION 4** SINGLE CHOICE

Which of the following routing protocols is classified as a link-state routing protocol?

A RIP

**B OSPF**

C EIGRP

D BGP

**ANSWER B**

**WHY** OSPF (Open Shortest Path First) is a link-state routing protocol that uses the Dijkstra shortest path first algorithm to calculate the best path. RIP is a distance-vector protocol, EIGRP is an advanced distance-vector (hybrid) protocol, and BGP is a path-vector protocol used between autonomous systems.

**QUESTION 5** SINGLE CHOICE

Which cloud computing service model provides users with a development and deployment platform for applications without requiring them to manage the underlying infrastructure, operating systems, or runtime environments?

A IaaS (Infrastructure as a Service)

B **PaaS (Platform as a Service)**

C SaaS (Software as a Service)

D FaaS (Function as a Service)

**ANSWER B**

**WHY** PaaS (Platform as a Service) provides a platform allowing customers to develop, run, and manage applications without the complexity of building and maintaining the underlying infrastructure. IaaS provides virtualized computing resources, SaaS delivers ready-to-use software applications over the internet, and FaaS (serverless) executes individual functions in response to events.

**QUESTION 6** SINGLE CHOICE

In which physical network topology do all devices connect to a central device, with all communication between devices required to pass through that central device?

A Bus

B Ring

C **Star**

D Mesh

**ANSWER C**

**WHY** In a star topology, all devices connect to a central device such as a switch or hub, and all communication passes through that central device. A bus topology uses a single shared backbone cable, a ring topology has devices connected in a circular fashion, and a mesh topology has multiple interconnections between devices.

**QUESTION 7** SINGLE CHOICE

A network administrator has been assigned the network 192.168.10.0/26. How many usable host addresses are available per subnet?

A 14

B 30

**C 62**

D 64

**ANSWER C**

**WHY** A /26 subnet mask (255.255.255.192) provides 6 host bits (32 minus 26 equals 6), which yields 2^6 = 64 total addresses per subnet. Subtracting 2 addresses (one for the network ID and one for the broadcast address) leaves 62 usable host addresses per subnet.

**QUESTION 8** SINGLE CHOICE

Which DNS record type is used to map a hostname to an IPv6 address?

A A

**B AAAA**

C MX

D CNAME

**ANSWER B**

**WHY** The AAAA record (also called 'quad-A') maps a hostname to an IPv6 address (128-bit). The A record maps a hostname to an IPv4 address (32-bit), MX records identify mail exchange servers for a domain, and CNAME records create an alias that points from one domain name to another.

**QUESTION 9** SINGLE CHOICE

Which security concept involves verifying the identity of a user, device, or system before granting access to network resources?

A Authorization

**B Authentication**

C Accounting

D Non-repudiation

**ANSWER B**

**WHY** Authentication is the process of verifying the identity of a user, device, or system, typically using credentials such as passwords, biometrics, or certificates. Authorization determines what an authenticated entity is permitted to do, accounting tracks user activity, and non-repudiation ensures that a party cannot deny having performed an action.