

CompTIA Network+

1. Networking Concepts

- a. Explain the purposes and uses of ports and protocols
- b. Explain devices, applications, protocols and services at their appropriate OSI layers.
- c. Explain the concepts and characteristics of routing and switching
- d. Given a scenario, configure the appropriate IP addressing components.
- e. Compare and contrast the characteristics of network topologies, types and technologies.
- f. Given a scenario, implement the appropriate wireless technologies and configurations.
- g. Summarize cloud concepts and their purposes
- h. Explain the functions of network services.

2. Infrastructure

- . Given a scenario, deploy the appropriate cabling solution.
 - a. Given a scenario, determine the appropriate placement of networking devices on a network and install/configure them.
 - b. Explain the purposes and use cases for advanced networking devices
 - c. Explain the purposes of virtualization and network storage technologies.
 - d. Compare and contrast WAN technologies.

3. Network Operations

- . Given a scenario, use appropriate documentation and diagrams to manage the network.
 - a. Compare and contrast business continuity and disaster recovery concepts.
 - b. Explain common scanning, monitoring and patching processes and summarize their expected outputs.
 - c. Given a scenario, use remote access methods
 - d. Identify policies and best practices.

4. Network Security

- . Summarize the purposes of physical security devices
 - a. Explain authentication and access controls
 - b. Given a scenario, secure a basic wireless network.
 - c. Summarize common networking attacks
 - d. Given a scenario, implement network device hardening.
 - e. Explain common mitigation techniques and their purposes.

5. Network Troubleshooting and Tools

- . Explain the network troubleshooting methodology
 - a. Given a scenario, use the appropriate tool.
 - b. Given a scenario, troubleshoot common wired connectivity and performance issues.
 - c. Given a scenario, troubleshoot common wireless connectivity and performance issues.
 - d. Given a scenario, troubleshoot common network service issues