



prep week: networks

The following exercise contains the following subjects:

- networks

Instructions

answer the questions:

Of course! Here are 30 basic questions on computer networking that you can use for exercises or quizzes, along with brief explanations of each:

1. What is a network?
2. Define LAN and WAN.
3. What is the purpose of an IP address?
4. Explain the difference between IPv4 and IPv6.
5. What is a subnet mask, and how does it work?
6. What is DNS, and what is its role in networking?
7. Describe the OSI model and its seven layers.
8. What is the difference between TCP and UDP?
9. What is a firewall, and why is it important in network security?
10. What is NAT (Network Address Translation)?
11. Explain the concept of bandwidth in networking.
12. What is a router, and how does it differ from a switch?
13. What is a MAC address, and why is it important?
14. What is a packet in networking?
15. What is a proxy server, and how does it work?



16. Define DHCP and its role in network configuration.
17. What is a VLAN (Virtual Local Area Network)?
18. Explain the terms "upload" and "download" in the context of networking.
19. What is a DDoS attack, and how does it affect network performance?
20. Describe the purpose of a VPN (Virtual Private Network).
21. What is ICMP, and what is its role in networking?
22. What is a static IP address, and when might it be preferred over dynamic IP addressing?
23. What is a router's default gateway, and why is it important?
24. Explain the concept of latency in networking.
25. What is a protocol in networking, and why are they necessary?
26. Describe the difference between a hub and a switch.
27. Explain the role of a DNS resolver in the DNS process.