Targeted Questions .

1. How many bits are used in an IPv4 address?
2. Can you explain what a network prefix is?
3. What is the maximum number of subnets that can be created for a given IP range?
4. What is the purpose of private IP addresses? Why are they important?
5. Are there any limitations with using private IP addresses? If yes, then what are they?
6. Is it possible to have duplicate public IP addresses on different hosts? If not, why?
7. What's the difference between reserved and static IP addresses?
8. What is the default subnet mask for a Class C IP address?
9. Since we're running out of IPv4 addresses, how do you think the future will look like?
10. What is the main advantage of using IPv6 over IPv4?
11. What does DHCP stand for?
12. Does every host need to use DHCP? Can you give some examples where this might not be needed?
13. What happens if two devices are assigned the same IP address by mistake?
14. What is the basic structure of an IPv6 address?
15. Can you explain the role of ARP in TCP/IP networks?
16. What are some common open ports and their uses in TCP/IP networks?
17. Can you explain what traceroute is? What is its benefit?
18. What is the primary function of a router?
19. What protocols make up the Internet protocol suite?
20. What is the main difference between HTTP and HTTPS?