**Practice Questions for firewall rules**

**Basic Rules:**

Scenario 1: Allow HTTP and HTTPS traffic from any source to the web server (192.168.1.100).

Firewall Rule:

* Allow incoming traffic on ports 80 (HTTP) and 443 (HTTPS) from any source to the IP address of the web server (192.168.1.100).

Scenario 2: Allow SSH access from a specific IP address (192.168.2.50) to a server (10.0.0.5).

Scenario 3: Allow SMTP traffic for sending emails from an internal mail server (10.1.1.20) to the internet.

Scenario 4: Block all incoming traffic from a specific IP range (192.168.3.0/24) to the network.

Scenario 5: Allow DNS traffic from any source to a DNS server (8.8.8.8).

**Advanced Rules:**

1. Allow HTTP and HTTPS traffic from any source to the web server.
2. Allow SSH access from a specific IP address to a server.
3. Allow SMTP traffic for sending emails from an internal mail server to the internet.
4. Block all incoming traffic from a specific IP range to the network.
5. Allow DNS traffic from any source to a DNS server.
6. Allow FTP traffic for a specific user from a specific IP address to the FTP server.
7. Allow ICMP Echo Request (Ping) from any source to a specific host.
8. Allow inbound traffic on a specific port to a server.
9. Allow outbound traffic to a specific IP address or domain.
10. Block incoming traffic on specific ports to enhance security.
11. Limit the rate of incoming requests for a specific service.
12. Allow traffic based on country or geographic location.
13. Allow outbound traffic for VoIP calls to a VoIP provider's server.
14. Block outgoing traffic to specific domains except for specific ports.
15. Allow remote access to a server from a specific management IP address.
16. Implement port forwarding for a specific service to a different internal IP address.
17. Allow or block traffic based on application or protocol types.
18. Implement NAT (Network Address Translation) for outgoing traffic.
19. Allow or block traffic based on user authentication or group membership.
20. Allow or block traffic based on time of day or schedule.