CompTIA

Sy0-601

QUESTIONS AND ANSWERS

FREE VERSION

(LIMITED CONTENT)

Dumps Questions sy0-601

Exam Name: CompTIA Security+ 2021

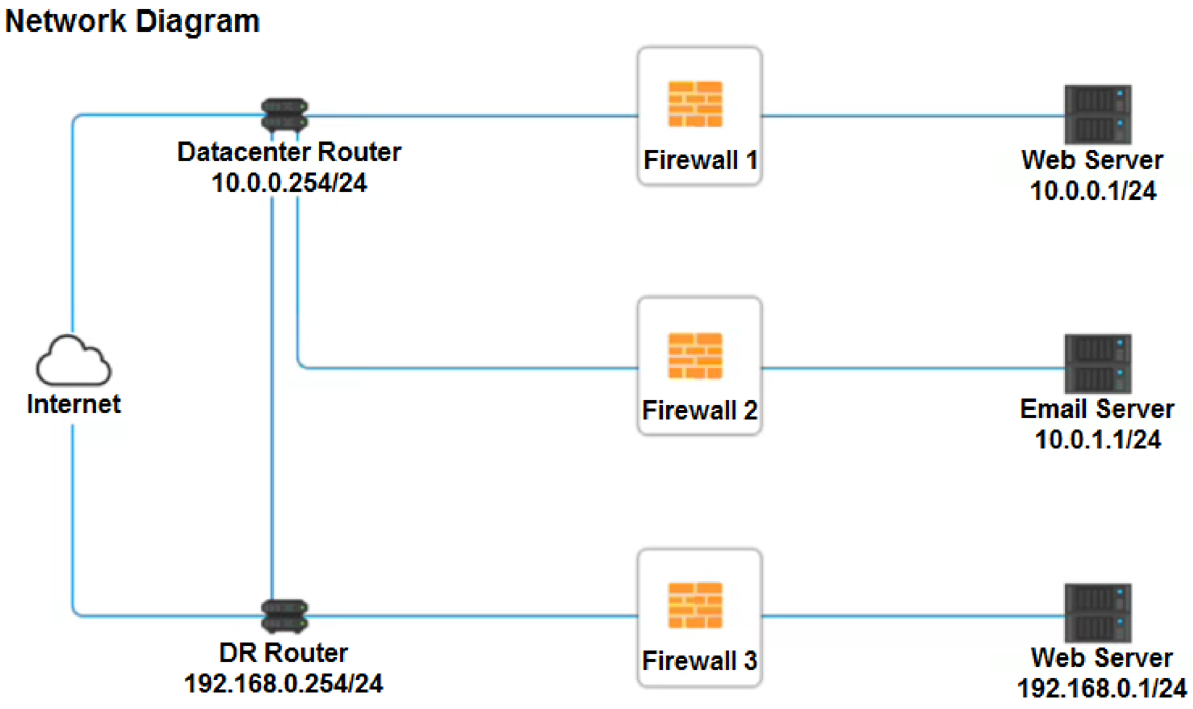
Certification Provider: CompTIA

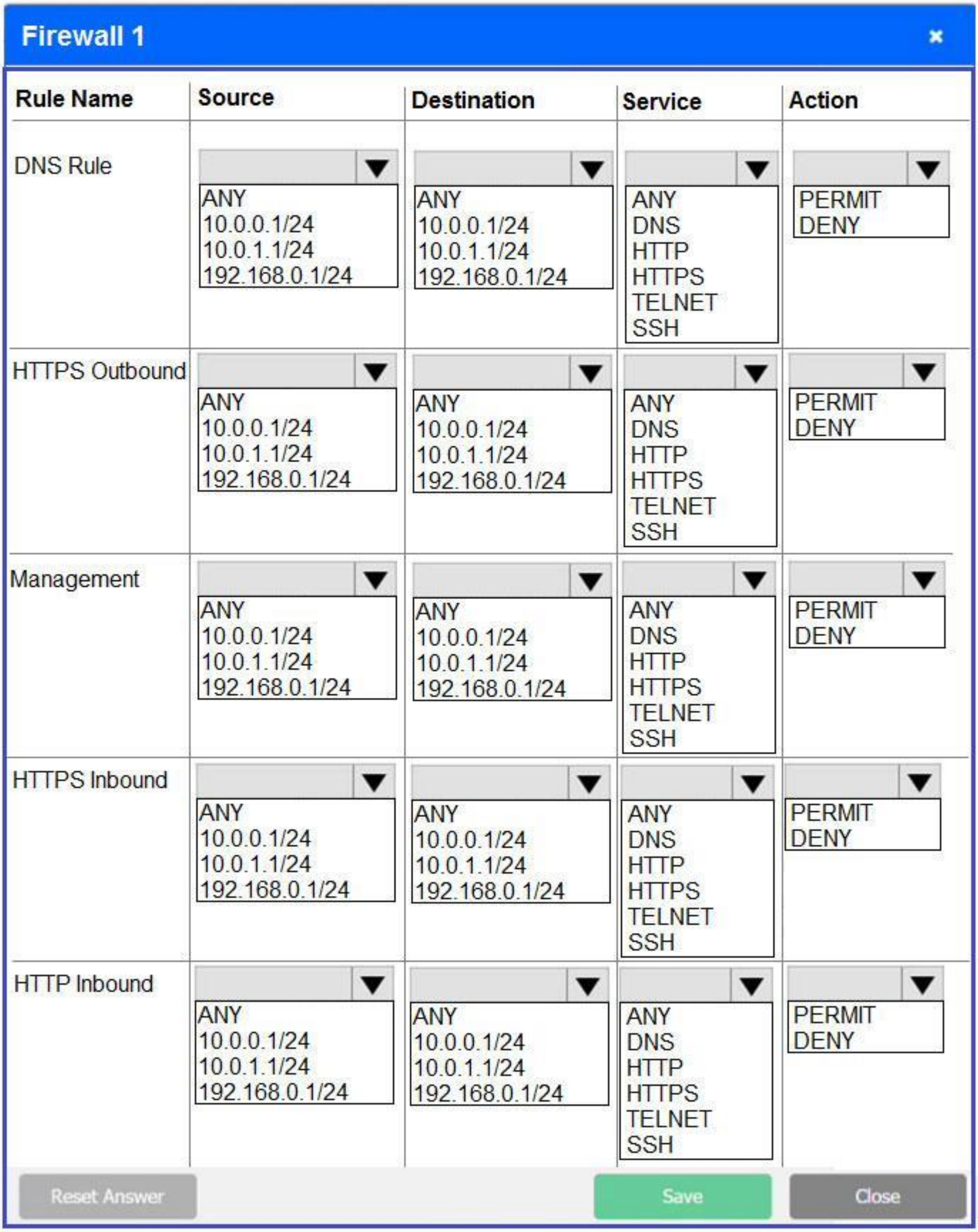
Exam: CompTIA Security+ 2021

Question #1

SIMULATION -
A company recently added a DR site and is redesigning the network. Users at the DR site are having issues browsing websites.

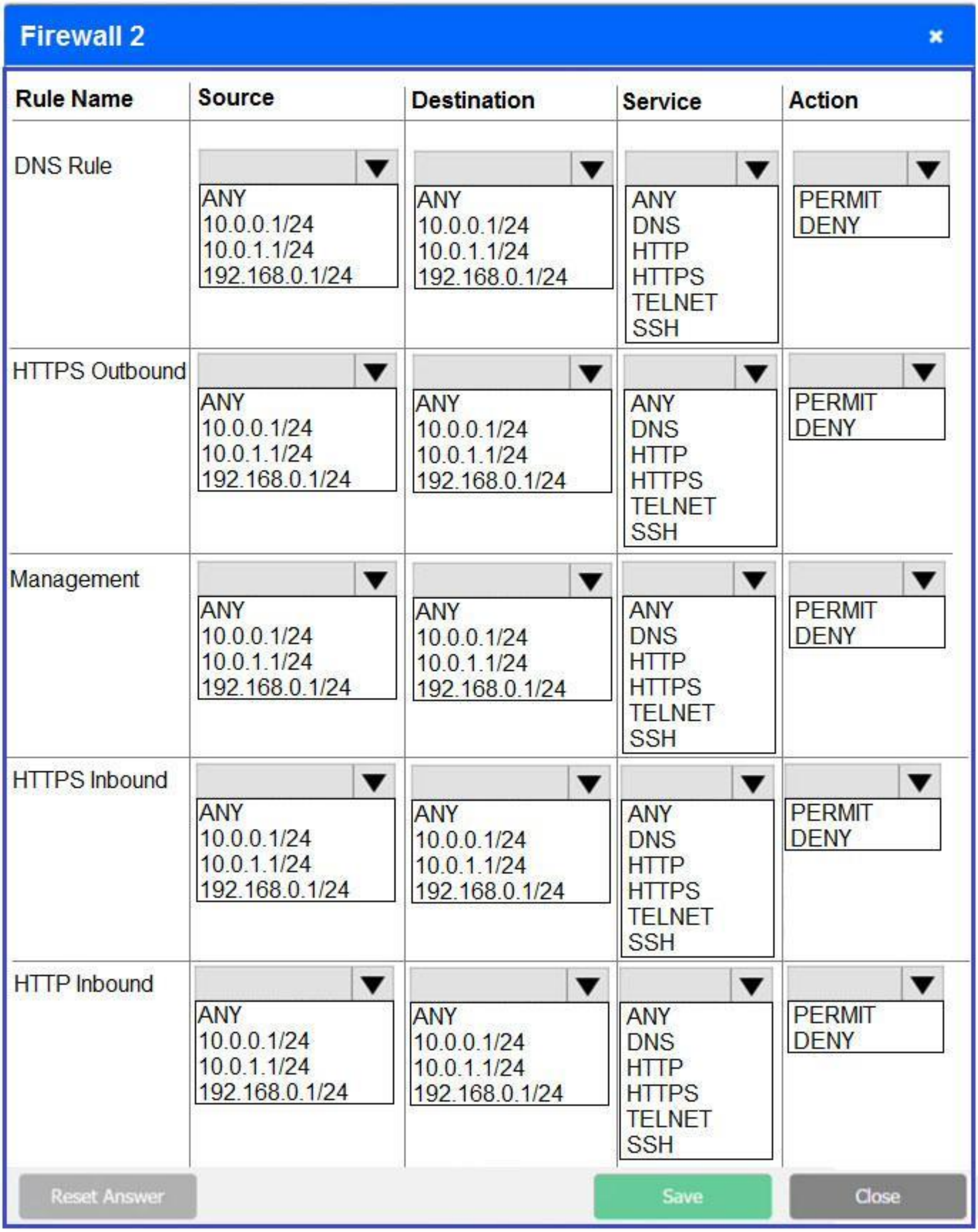
INSTRUCTIONS -
Click on each firewall to do the following:
1. Deny cleartext web traffic.
2. Ensure secure management protocols are used.
3. Resolve issues at the DR site.
The ruleset order cannot be modified due to outside constraints.
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.





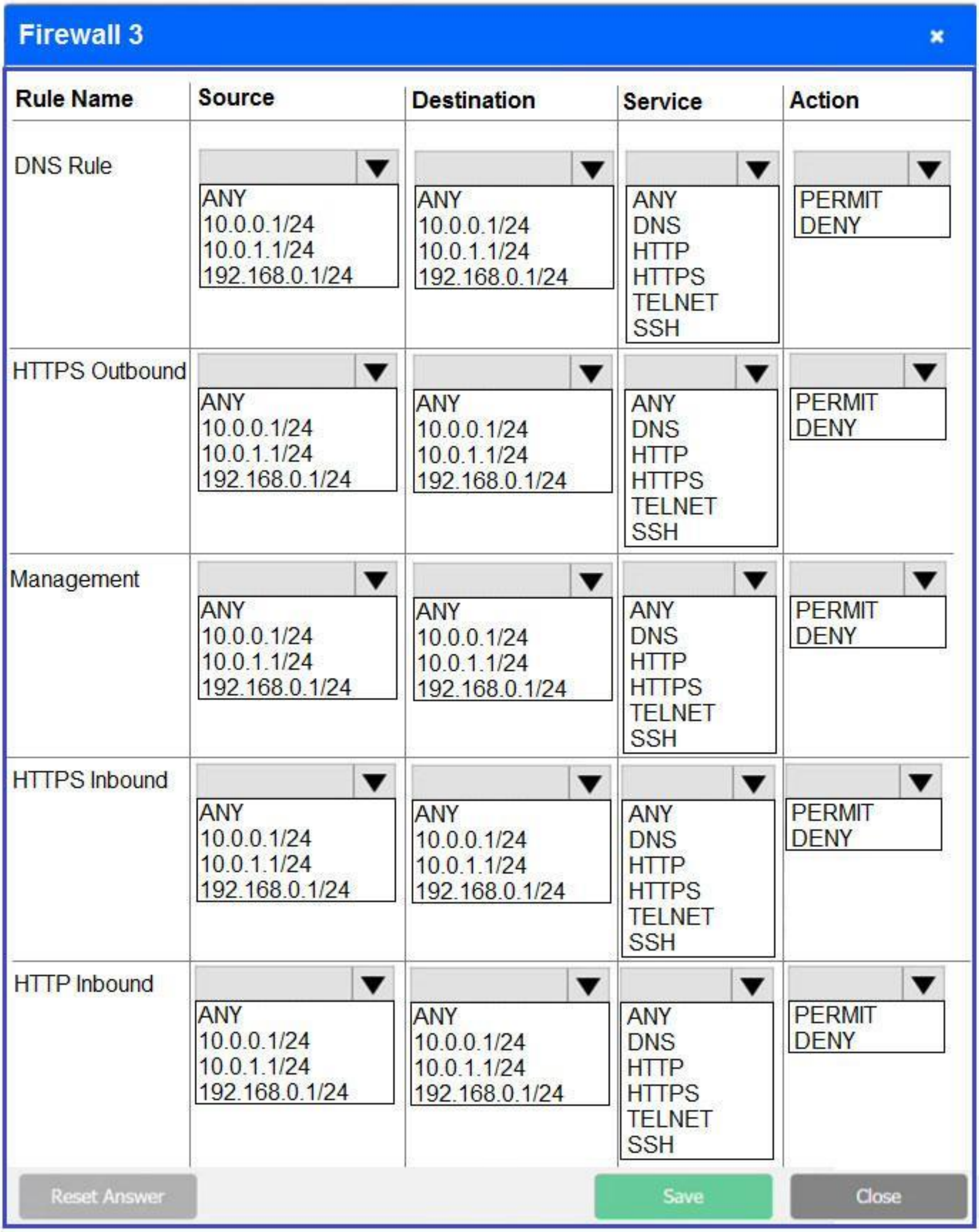
Firewall 1

Rule Name	Source	Destination	Service	Action
DNS Rule	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
HTTPS Outbound	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
Management	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
HTTPS Inbound	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
HTTP Inbound	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY



Firewall 2

Rule Name	Source	Destination	Service	Action
DNS Rule	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
HTTPS Outbound	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
Management	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
HTTPS Inbound	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
HTTP Inbound	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY



Firewall 3

Rule Name	Source	Destination	Service	Action
DNS Rule	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
HTTPS Outbound	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
Management	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
HTTPS Inbound	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
HTTP Inbound	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY

Correct Answer: See explanation below.

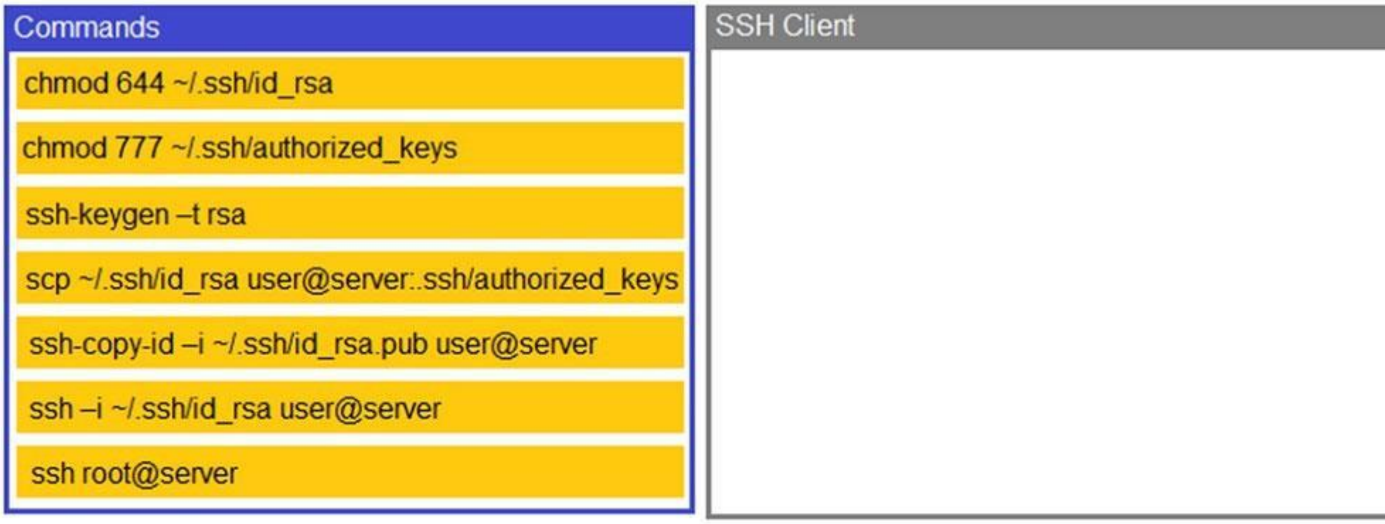
Firewall 1:

DNS Rule "" ANY --> ANY --> DNS --> PERMIT
HTTPS Outbound "" 10.0.0.1/24 --> ANY --> HTTPS --> PERMIT
Management "" ANY --> ANY --> SSH --> PERMIT
HTTPS Inbound "" ANY --> ANY --> HTTPS --> PERMIT
HTTP Inbound "" ANY --> ANY --> HTTP --> DENY
Firewall 2: No changes should be made to this firewall
Firewall 3:
DNS Rule "" ANY --> ANY --> DNS --> PERMIT
HTTPS Outbound "" 192.168.0.1/24 --> ANY --> HTTPS --> PERMIT
Management "" ANY --> ANY --> SSH --> PERMIT
HTTPS Inbound "" ANY --> ANY --> HTTPS --> PERMIT
HTTP Inbound "" ANY --> ANY --> HTTP --> DENY

Question #2

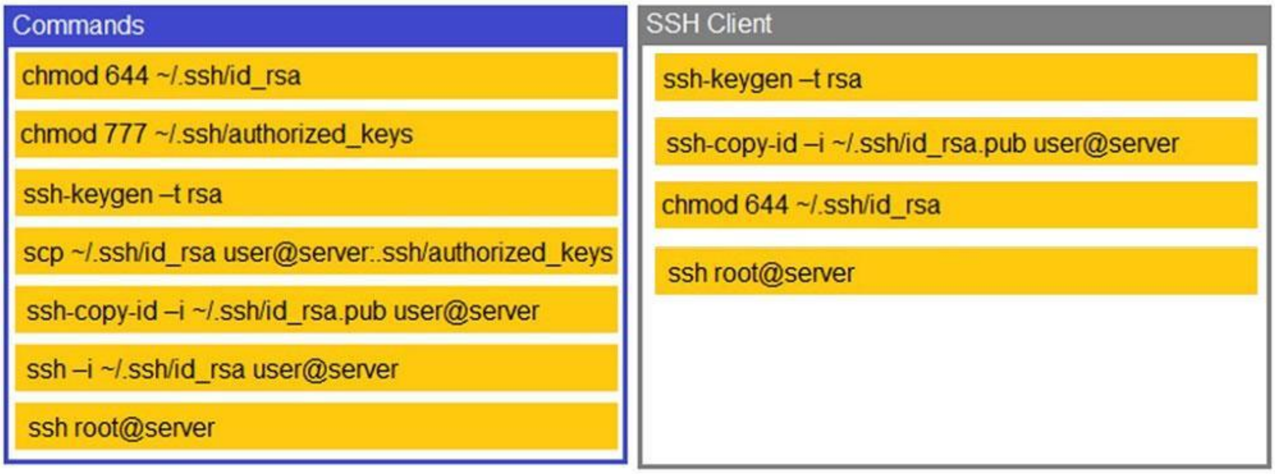
DRAG DROP -
A security engineer is setting up passwordless authentication for the first time.

INSTRUCTIONS -
Use the minimum set of commands to set this up and verify that it works. Commands cannot be reused.
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.
Select and Place:



```
chmod 644 ~/.ssh/id_rsa
chmod 777 ~/.ssh/authorized_keys
ssh-keygen –t rsa
scp ~/.ssh/id_rsa user@server:.ssh/authorized_keys
ssh-copy-id –i ~/.ssh/id_rsa.pub user@server
ssh –i ~/.ssh/id_rsa user@server
ssh root@server
```

Correct
Answer:



Commands

chmod 644 ~/.ssh/id_rsa

chmod 777 ~/.ssh/authorized_keys

ssh-keygen –t rsa

scp ~/.ssh/id_rsa user@server:.ssh/authorized_keys

ssh-copy-id –i ~/.ssh/id_rsa.pub user@server

ssh –i ~/.ssh/id_rsa user@server

ssh root@server

SSH Client

ssh-keygen –t rsa

ssh-copy-id –i ~/.ssh/id_rsa.pub user@server

chmod 644 ~/.ssh/id_rsa

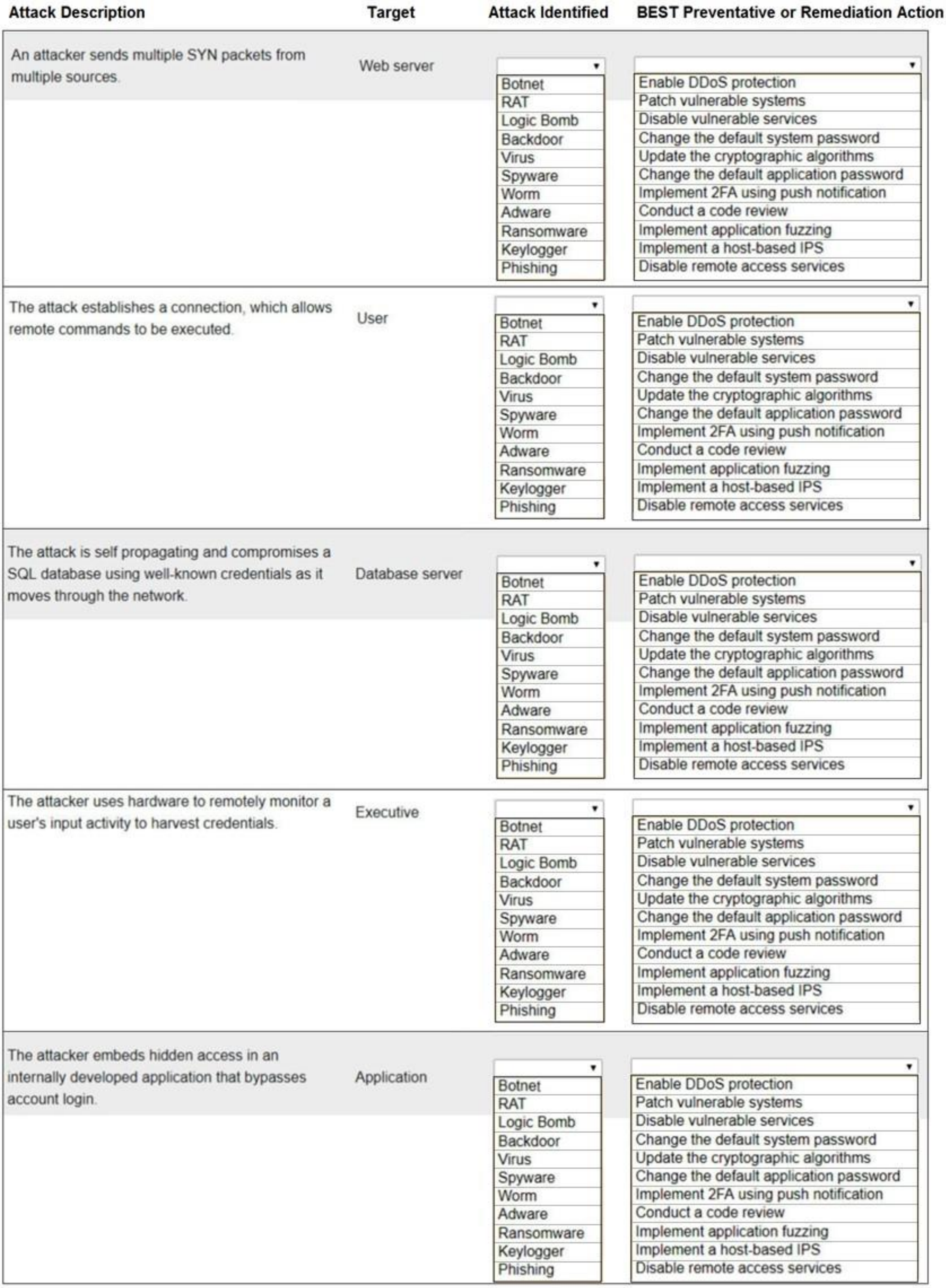
ssh root@server

Question #3

HOTSPOT -
Select the appropriate attack and remediation from each drop-down list to label the corresponding attack with its remediation.

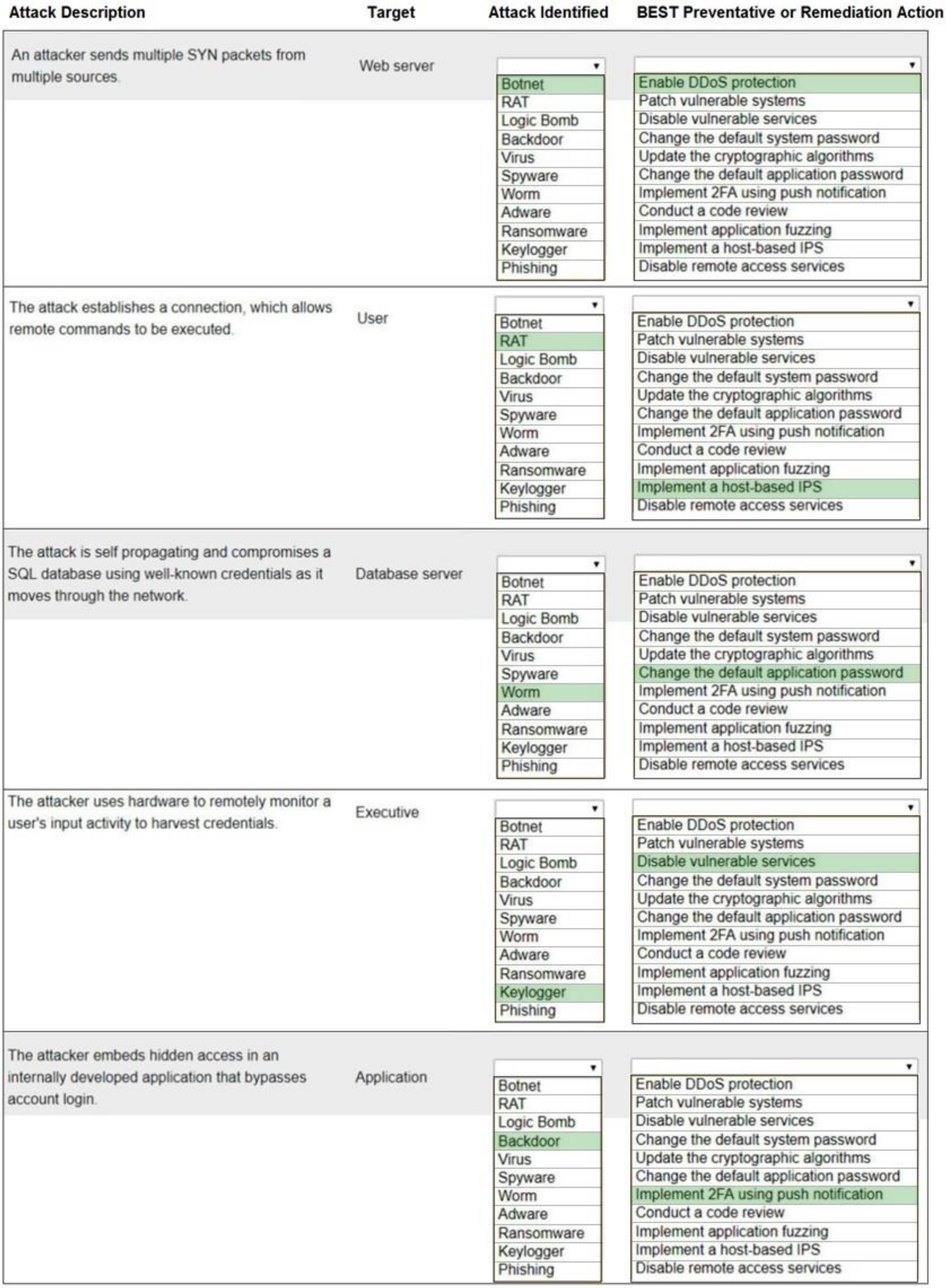
INSTRUCTIONS -
Not all attacks and remediation actions will be used.
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.

Hot Area:



Attack Description	Target	Attack Identified	BEST Preventative or Remediation Action
An attacker sends multiple SYN packets from multiple sources.	Web server	Botnet RAT Logic Bomb Backdoor Virus Spyware Worm Adware Ransomware Keylogger Phishing	Enable DDoS protection Patch vulnerable systems Disable vulnerable services Change the default system password Update the cryptographic algorithms Change the default application password Implement 2FA using push notification Conduct a code review Implement application fuzzing Implement a host-based IPS Disable remote access services
The attack establishes a connection, which allows remote commands to be executed.	User	Botnet RAT Logic Bomb Backdoor Virus Spyware Worm Adware Ransomware Keylogger Phishing	Enable DDoS protection Patch vulnerable systems Disable vulnerable services Change the default system password Update the cryptographic algorithms Change the default application password Implement 2FA using push notification Conduct a code review Implement application fuzzing Implement a host-based IPS Disable remote access services
The attack is self propagating and compromises a SQL database using well-known credentials as it moves through the network.	Database server	Botnet RAT Logic Bomb Backdoor Virus Spyware Worm Adware Ransomware Keylogger Phishing	Enable DDoS protection Patch vulnerable systems Disable vulnerable services Change the default system password Update the cryptographic algorithms Change the default application password Implement 2FA using push notification Conduct a code review Implement application fuzzing Implement a host-based IPS Disable remote access services
The attacker uses hardware to remotely monitor a user's input activity to harvest credentials.	Executive	Botnet RAT Logic Bomb Backdoor Virus Spyware Worm Adware Ransomware Keylogger Phishing	Enable DDoS protection Patch vulnerable systems Disable vulnerable services Change the default system password Update the cryptographic algorithms Change the default application password Implement 2FA using push notification Conduct a code review Implement application fuzzing Implement a host-based IPS Disable remote access services
The attacker embeds hidden access in an internally developed application that bypasses account login.	Application	Botnet RAT Logic Bomb Backdoor Virus Spyware Worm Adware Ransomware Keylogger Phishing	Enable DDoS protection Patch vulnerable systems Disable vulnerable services Change the default system password Update the cryptographic algorithms Change the default application password Implement 2FA using push notification Conduct a code review Implement application fuzzing Implement a host-based IPS Disable remote access services

Correct
Answer:



Attack Description	Target	Attack Identified	BEST Preventative or Remediation Action
An attacker sends multiple SYN packets from multiple sources.	Web server	[✓ Botnet] RAT Logic Bomb Backdoor Virus Spyware Worm Adware Ransomware Keylogger Phishing	[✓ Enable DDoS protection] Patch vulnerable systems Disable vulnerable services Change the default system password Update the cryptographic algorithms Change the default application password Implement 2FA using push notification Conduct a code review Implement application fuzzing Implement a host-based IPS Disable remote access services
The attack establishes a connection, which allows remote commands to be executed.	User	Botnet [✓ RAT] Logic Bomb Backdoor Virus Spyware Worm Adware Ransomware Keylogger Phishing	Enable DDoS protection Patch vulnerable systems Disable vulnerable services Change the default system password Update the cryptographic algorithms Change the default application password Implement 2FA using push notification Conduct a code review Implement application fuzzing [✓ Implement a host-based IPS] Disable remote access services
The attack is self propagating and compromises a SQL database using well-known credentials as it moves through the network.	Database server	Botnet RAT Logic Bomb Backdoor Virus Spyware [✓ Worm] Adware Ransomware Keylogger Phishing	Enable DDoS protection Patch vulnerable systems Disable vulnerable services Change the default system password Update the cryptographic algorithms [✓ Change the default application password] Implement 2FA using push notification Conduct a code review Implement application fuzzing Implement a host-based IPS Disable remote access services
The attacker uses hardware to remotely monitor a user's input activity to harvest credentials.	Executive	Botnet RAT Logic Bomb Backdoor Virus Spyware Worm Adware Ransomware [✓ Keylogger] Phishing	Enable DDoS protection Patch vulnerable systems [✓ Disable vulnerable services] Change the default system password Update the cryptographic algorithms Change the default application password Implement 2FA using push notification Conduct a code review Implement application fuzzing Implement a host-based IPS Disable remote access services
The attacker embeds hidden access in an internally developed application that bypasses account login.	Application	Botnet RAT Logic Bomb [✓ Backdoor] Virus Spyware Worm Adware Ransomware Keylogger Phishing	Enable DDoS protection Patch vulnerable systems Disable vulnerable services Change the default system password Update the cryptographic algorithms Change the default application password [✓ Implement 2FA using push notification] Conduct a code review Implement application fuzzing Implement a host-based IPS Disable remote access services