Practice CompTIA+ Exam 1

- Due No due date
- Points 99
- Questions 99
- Time Limit 100 Minutes

Instructions

The actual CompTIA Security+ exam has a maximum of 90 questions with a 90-minute time limit. This practice quiz has 99 questions, so I imposed a 100-minute time limit. Please take the exam as you would the actual exam and follow what you know and your instincts. This practice exam does not count towards the grade in the Foundations of Cybersecurity class. I'm sure there are questions that we haven't covered, just give it your best try.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	68 minutes	88 out of 99

(!) Correct answers are hidden.

Submitted Oct 31 at 12:15pm

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IncorrectQuestion 1

0 / 1 pts

Emma is the CEO of a bank. She has received an email that is encouraging her to click on a link and fill out a survey. Being security conscious, she normally does not click on links. However, this email calls her by name and claims to be a follow-up to a recent conference she attended. Which of the following best describes this attack?

- Vishing
- Social engineering
- Spear phishing
- Whaling

Question 2

1 / 1 pts

Isaac has conducted a port scan and identified a service running on TCP port 389. What port would he typically expect the secure version of the same service to run on?

The slope of its elliptic curve

Question 6

1 / 1 pts

Ursula needs to explain the concept of certificate stapling to her organization's web team. Which of the following best describes OCSP stapling?

It attaches an X.509 certificate to a cryptographic private key, simplifying the Transport Layer Security (TLS) transaction.



It connects a time-stamped OCSP response signed by the CA to the TLS handshake, allowing clients to bypass the need to contact the CA directly.

It attaches a symmetric key to an X.509 certificate, allowing clients to use less computationally complex encryption for the remainder of the web session.

It connects a time-stamped public key to the private key originally sent by a server, completing the X.509 certificate for the client.

Question 7

1 / 1 pts

What component of a modern PC can act as a random number generator, create cryptographic keys for specific purposes, and help with remote attestation processes for boot-time-loaded drivers and other components?

- A PKI
- A TPM
- An HSM
- An SBUS

Question 8

1 / 1 pts

There is a common security issue that is extremely hard to control in large environments. It occurs when a user has more computer rights, permissions, and privileges than what is required for the tasks the user needs to fulfill. This is the opposite of what principle?

- Separation of duties
- Least privileges
- Transitive trust
- Account management

Question 9

1 / 1 pts

Rae receives an anonymous tip that an attacker intends to perform a watering hole attack against her organization. What target should she seek to monitor and possibly protect?

- The company's primary file server
- The organization's food and beverage systems
- The websites most frequently visited by the company's employees
- The break room PC

1 / 1 pts

Kyle wants to ensure that he has an ap	opropriate level of	geographic dispers	al for his organiz	:ation's two
datacenters. What distance should he	place them at?			

- Inside the same town to allow for staff to reach either datacenter in an emergency
- At a distance where latency will not impact systems communications
- At a distance where a single disaster is unlikely to impact both datacenters

At the maximum distance that they can afford to be separated by to minimize the chance of disasters ever impacting both at once

Question 11

1 / 1 pts

Meena is looking for a type of access control that enforces authorization rules by the operating system. Users cannot override authentication or access control policies. Which of the following best fits this description?

- DAC
- MAC
- RBAC
- ABAC

Question 12

1 / 1 pts

Alaina needs to set up a wireless network using WPA2. She wants to support encryption but does not have the ability to use Enterprise authentication mode. What is her best option?

- PSK
- A captive portal
- Open Wi-Fi
- SAE

Question 13

1 / 1 pts

Lilly is responsible for security on web applications for her company. She is checking to see that all applications have robust input validation. What is the best way to implement validation that she can trust?

- Server-side validation
- Client-side validation
- Validate in transit
- None of the above

A functional risk assessment

A qualitative risk assessment
IncorrectQuestion 18
0 / 1 pts
Michelle is deploying wireless IoT sensors throughout her organization's facilities and intends to connect them to the network. What common security risk should she be aware of before connecting her IoT
devices to the network?
Lack of computational power
Weak default settings
Lack of cryptographic support
All of the above
Question 19
1 / 1 pts
How is the integrity of forensic artifacts verified?
Using cryptographic salts
By using full-disk encryption
By comparing MD5 or SHA1 hashes
By using a cryptographic nonce
Question 20
1 / 1 pts
An attacker is trying to get malformed queries sent to the backend database to circumvent the web page's security. What type of attack depends on the attacker entering text into text boxes on a web page
that includes special characters and commands that are designed to be inserted into database queries?
 SQL injection
○ Clickjacking
Cross-site scripting
O Bluejacking
Question 21
1 / 1 pts
Hinata is considering biometric access control solutions for her company. She is concerned about the crossover error rate (CER). Which of the following most accurately describes the CER?
The rate of false acceptance
The rate of false rejection
The point at which false rejections outpace false acceptances
The point at which false rejections and false acceptances are equal

1 / 1 pts Which of the following descriptions best describes a tabletop exercise? An exercise set up to run like a game, allowing responders to score points and compete against one another Staff members who will be involved in a response process discussing a scenario or scenarios in an informal review process Any exercise that is run in a room with a table An exercise that is intended to resemble a real event as closely as possible Question 27 1 / 1 pts Tom has been asked to implement a solution that will help his organization apply least privilege principles to local administrative accounts as well as to Windows domain accounts. What type of solution should he look for? A PAM solution A DAC solution An SSO solution A CHAP solution Question 28 1 / 1 pts Jack wants to set up automated indicator sharing (AIS) through his threat intelligence tool. What standard language should he ensure that his threat feed supports to allow him to pull the threat data into most modern threat tools? Python SAML STIX ThreatML Question 29 1 / 1 pts Susan logs in at the university she is attending and can then use her credentials to access systems at other universities around the country, because those institutions trust her home institution and give her rights based on her membership and account there. What concept is she taking advantage of? O MDM Federation

OAuth

SAE

12/9/24, 11:18 AM Practice 0	CompTIA+ Exam 1: Foundations of Cybersecurity
!!	
Question 30	
1 / 1 pts	
Tracy wants to find evidence of SQL injection at	tacks against her Apache web server on a Debian
server. Which of the following locations is most I	ikely to contain evidence of those attacks?
○ auth.log	
access.log	
system.log	
o secure.log	
Question 31	
1 / 1 pts	
Jason wants to implement an always-on virtual patternology should he use?	orivate network (VPN) for his company. What VPN
An IPSec VPN	
O An SAML VPN	
O An SSL VPN	
O An SSH VPN	
Question 32	
1 / 1 pts	
Which of the following best describes residual ris	sk?
Risk that remains after insurance is purchased is m	an-made risks
 Risk that remains after controls are implemented fo 	r inherent risks
 Risk that remains due to a lack of patches and upda 	ates
 Risk that remains due to undiscovered vulnerabilities 	es like zero-day exploits
Question 33	
1 / 1 pts	haliawaa that aanaana is aantuullina kis maakina
remotely. What type of malware is Jill most likely	believes that someone is controlling his machine to find if this is true?
○ A worm	
A RAT	
O A virus	
○ A CROW	
!	
IncorrectQuestion 34	

0 / 1 pts

Which of the following would prevent a user from installing a program on a company-owned mobile device?
O Allow lists
Deny lists
O ACL
HIDS
Question 35
1 / 1 pts
You have instructed all administrators to disable all nonessential ports on servers at their sites. Why are nonessential ports a security issue that you should be concerned about?
Nonessential ports provide additional areas of attack.
Nonessential ports can't be secured.
Nonessential ports are less secure.
 Nonessential ports require more administrative effort to secure.
iii Question 36
1 / 1 pts
In 2019, VxWorks vulnerabilities were announced that could allow for remote code execution. What is
the most severe issue that this type of vulnerability in a real-time operating system (RTOS) results in?
Attackers could gain remote administrative control of impacted devices.
Attackers could crash impacted devices.
Attackers could cause a denial-of-service condition for impacted devices.
Attackers could gather information from impacted devices.
Question 37
1 / 1 pts
Helen has been asked to review her organization's wireless security and discovers that the organization
is using an open Wi-Fi network. What recommendation should Helen make to most significantly increase the security of the network?
Implement a captive portal to provide secure access to the network.
Implement WPA2 in SAE mode.
Implement WPA2 Enterprise.
Implement WPA2 PSK.
iii Question 38
1 / 1 pts
· · · · · · · · · ·

Kristen is building a red team for her company and wants to select a tool to help them quickly conduct
penetration tests. Which of the following tools will provide them with an automated means of collecting
penetration test data?

penetration test data:
○ curl
Cuckoo
O PowerShell
sn1per
Question 39
1 / 1 pts
What is a wildcard certificate used for?
Multiple domains
Multiple systems from multiple domains
Multiple servers with the same name
Multiple subdomains of a domain
Question 40
1 / 1 pts
What is the primary concern Megan should have about zero-day vulnerabilities that might impact her
web server software?
They cannot be patched.
They cannot be detected by an IPS.
They cannot be blocked by a firewall.
They cannot be acted on until they are disclosed.
Question 41
1 / 1 pts
Charles wants to protect data at rest in his cloud computing environment. What is his best option to
ensure that it cannot be stolen?
○ Tokenization
O Data minimization
Encryption
O Hashing
Question 42

1 / 1 pts

Selah wants to quickly add an additional line to a file using a single command at the command line. What command-line tool should she use?

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o netcat	
head	
○ tail	
cat	
!	
Question 43	
1 / 1 pts	
	n area where lightning strikes frequently cause power knows that her generator is slow to start, so she wants to add
A detective control	J :
A detective control A deterrent control	
A compensating control	
An operational control	
Question 44	
1 / 1 pts	
website, and now his client files have the	r file extensions changed and he cannot open them. He has files are now encrypted and he must pay .5 bitcoins to get
His machine has a rootkit.	
His machine has a logic bomb.	
His machine has a boot sector virus.	
His machine has ransomware.	
#	
Question 45	
1 / 1 pts	
	systems throughout his network. What tool can he use to scan
for and identify those services?	
dig	
hping	
arp	
nmap	
Ougation 46	
Question 46	
1 / 1 pts	

lan's organization has implemented DNSSEC for their Domain Name System (DNS) environment, and lan needs to explain to his management what it does. Which of the following descriptions accurately describes the security improvement that DNSSEC provides?

describes the security improvement that DNSSEC provides?
It provides end-to-end encryption using TLS for DNS queries.
It cryptographically authenticates DNS data and provides data integrity.
It uses symmetric encryption to allow DNS servers to conduct secure zone transfers and updates.
 All of the above
Question 47
1 / 1 pts
Derek wants to access a filesystem on a machine that has experienced an operating system failure that prevents it from booting. What nonpersistent option will allow him to boot the system without the operating system working?
Reverting to a known good state
A live boot tool
A last-known good configuration checkpoint
A reinstallation of the operating system
Question 48
1 / 1 pts
Jerome is following the order of volatility and needs to preserve a system's memory state, its disk drive,
and backups of the system. Which order should he work from, from most volatile to least volatile?
Backups, memory, disk drives
 Memory, backups, disk drives
O Disk drive, memory, backups
 Memory, disk drive, backups
Question 49
1 / 1 pts
Which recovery site is the easiest to test?
Warm site
Cold site
Hot site
O Medium site

IncorrectQuestion 50

0 / 1 pts

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Mikayla believes that the system she is re	eviewing may have fallen victim to a DLL injection attack. What
type of malware is she most likely to find	?
A RAT	
Memory-resident malware	
○ A worm	
Spyware	
Question 51	
1 / 1 pts	
Megan's company is preparing to move t	o a continuous integration/continuous delivery (CI/CD)
environment. Which of the following is no	ot a typical component of a continuous delivery pipeline?
Analysis	
Continuous deployment	
Feedback	
○ Visibility	
Question 52	
1 / 1 pts	
	ess services on a photo-editing site. What role is Google playing
in this scenario?	
An IdP	
O An SP	
O An IDS	
O An DLP	

1 / 1 pts

Melissa has installed a fire suppression system. What type of strategy is Melissa's company engaging in?

Risk acceptance

Risk avoidance

Risk transference

Risk mitigation

Question 54

1 / 1 pts

You are the head of the IT department of a school and are looking for a way to promote safe and responsible use of the Internet for students. With the help of the teachers, you develop a document for

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students to sign that describe	s methods of accessing the Internet on the school's network. Which of the
following best describes this of	document?
Service level agreement	
Acceptable use policy	
O Incident response plan	
Chain of custody	
Question 55	
1 / 1 pts	
Emily is setting up a load bala resources. What does she ne	ancer and wants to ensure that systems can connect to it and access ed to set up to ensure this?
A round-robin NAT	
A transit gateway	
A VIP	
An ARP interpreter	
•	
Question 56	
1 / 1 pts	
What is the primary danger of	f false negatives in vulnerability scans?
 Vulnerabilities that are not the 	re may be identified.
Incorrect patches may be insta	alled.
Systems may be vulnerable be	ut identified as safe.
 Services may crash due to the 	e use of the wrong plug-in for testing.
••	
Question 57	
1 / 1 pts	
	ensible Authentication Protocol (EAP) modes to choose from and is
· ·	wireless network. What requirement of EAP-TLS makes it harder to
manage for large installations	
	ged on a regular basis, typically less than one year.
 Certificates must be managed 	
	ly updated from EAP-SSL to EAP-TLS.
The PAC, or protected access	credential, needs to be manually provisioned to each client.

1 / 1 pts

Brian is building a data classification scheme for his company. Which of the following classification categories is the least protected and secure?

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Public	
Private	
Sensitive	
 Confidential 	
ii	
Question 59	
1 / 1 pts	
load balancer in place for the company's	ague, you suggest there is a single point of failure in the single SQL server. You suggest implementing two load balancers in time. What type of load balancing configuration have you
O Active-active	
Active Directory	
Round robin	
Active-passive	
!	
Question 60	
1 / 1 pts	
, ,	entified the need to run separate systems for credit card
, , , , ,	tunately, the organization does not have space or funds to put ad opts to use dedicated credit card processing devices. What
type of control is this?	ad opts to use dedicated credit card processing devices. What
Preventive	
Managerial	
Compensating	
Deterrent	
Boonen	
Question 61	
1 / 1 pts	
A user is redirected to a different website	when the user requests the Domain Name System (DNS)
record www.xyz.com. Which of the follow	ring is this an example of?
DNS poisoning	
ODoS	
ONS caching	
 Smurf attack 	
!	
Question 62	
1 / 1 pts	

Sean wants to help protect his organization's new facility by making it less likely to be targeted by casual attackers who may notice things like corporate signs, logos, or flashy buildings. What technique should he use to help keep his company's new building off attackers' radar?

Anonymous building
 Screened facilities
Industrial camouflage
Corporate armor
Question 63
1 / 1 pts
Paul wants to ensure that the cryptographic system he is using will not expose data even if the session keys originally set up for data exchange are compromised. What feature is he looking for in a cryptosystem?
Continuous key obfuscation (CKO)
Perfect forward secrecy (PFS)
Quantum cryptography
Ephemeral salting
Question 64
1 / 1 pts
Scott was using his company's wireless network and then noticed he lost connection. Shortly afterward, he was able to reconnect. What type of wireless attack is most likely to have occurred if this was a malicious event?
○ Jamming
Disassociation
O Evil twin
○ Wi-snarfing
Question 65
1 / 1 pts
Kathleen wants to implement a touchless payment system for her company. What wireless technology is
most frequently used for touchless payment?
O Bluetooth
O Infrared
NFC
O Wi-Fi

1 / 1 pts

Which environment is most frequently used for vulnerability scans in organizations with mature development lifecycles if service outages are a major concern?

development modylics in service datages are a major concern.
O Development
Staging
○ Test
Production
Question 67
1 / 1 pts
Olivia has implemented UEFI Measured Boot and knows that it will perform an action when it is done.
What occurs at the end of a measured boot process?
Attestation to the user via the UEFI bootloader screen
Attestation to the operating system via an OS plug-in
Attestation to the operating system via a native OS tool
Attestation to a remote attestation server
Question 68
1 / 1 pts
STIX, or Structure Threat Information Expression, uses a standard vocabulary for threat actor
sophistication. Which of the following terms best describes the sophistication that you would expect a
script kiddie to have as described by a STIX threat feed?
O Innovator
O Expert
O Practitioner
Novice
Question 69
1 / 1 pts
Ryan has recently signed a legal agreement with a service provider that provides a 10 percent refund of
their monthly service fees for a cloud service if an interruption occurs that lasts longer than four hours.
What type of legal document has Ryan most likely signed?
O An MOU
An SLA
O An NDA
O A BPA

1 / 1 pts

Mary has noticed that when her organization's applications receive unexpected input they show details of the local directory, SQL code, and other details of what occurred that led to the problem. What concern should she express to the developers in her organization?

A need for better error handling
 A need for regular data backups
 They need to ensure they are using encrypted data transmission.
 They should implement strong authentication.
 Question 71

1 / 1 pts

Systems that Nolan's employer has recently purchased have come with malware installed on them. The vendor claims that the systems are leaving their production floor without malware on them. What is the primary risk that Nolan should identify in this scenario?

- Lack of vendor support
- Supply chain
- System integration
- Data storage

IncorrectQuestion 72

0 / 1 pts

The company that Chris works for is located in an area that is frequently struck by hurricanes. Which of the following solutions should he implement in his cloud-hosted environment to ensure that a regional disruption of the cloud provider does not cause his website to become unavailable?

- Load balancing
- RAID
- HA across zones
- CASB

IncorrectQuestion 73

0 / 1 pts

Joe wants to select an attack framework to help his organization describe adversary tools and tactics in ways that are used across the industry. Which of the following frameworks is the most broadly adopted and integrated with existing tools?

- The Diamond Model of Intrusion Analysis
- MITRE ATT&CK
- The Cyber Kill Chain

The COOP model

IncorrectQuestion 74

0 / 1 pts

Carlos works in incident response for a midsized bank. Users inform him that internal network connections are fine but that connecting to the outside world is very slow. Carlos reviews logs on the external firewall and discovers tens of thousands of Internet Control Message Protocol (ICMP) packets coming from a wide range of different IP addresses. What type of attack is occurring?

- Smurf
- O DoS
- O DDoS
- SYN flood

Question 75

1 / 1 pts

You are comparing biometric solutions for your company, and the product you pick must have an appropriate false acceptance rate (FAR). Which of the following best describes FAR?

- How often an unauthorized user is granted access by mistake
- How readily users accept the new technology, based on ease of use
- How often an authorized user is not granted access.
- How frequently the system is offline

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Question 76

1 / 1 pts

Xyla notices that the gas pump she is using has an added module that reads her credit card as she inserts it. When she pulls on it, it comes off of the pump, revealing additional hardware inside that looks like a cellular modem and a camera. What type of attack has she likely uncovered?

- Skimming
- A malicious USB attack
- A card cloning attack
- A brute-force attack

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Question 77

1 / 1 pts

What administrative control should Ujama implement to reduce the likelihood of malicious actions by new hires in his organization?

- Install a camera system that monitors their work.
- Conduct background checks for all new employees.

 Install locks on all the doors that new employees should not enter or access.
Use automated theft detection software to identify patterns of behavior that may be malicious.
Question 78
1 / 1 pts
Alyssa is setting up the mobile device management tool her company recently bought and wants to
ensure that staff members who are issued a mobile device do not use unapproved applications. Which
of the following can give her the complete control of applications that can be installed?
An application approved list
An application deny list
○ A go/no-go list
O None of the above
Question 79
1 / 1 pts
What does the term "known environment test" mean?
The tester has full knowledge of the environment.
The tester works with the environment daily and has helped construct it.
The tester has permission to access the system.
The tester has no permission to access the system.
Question 80
1 / 1 pts
Emma wants to calculate the mean time between failures for a device in her organization. How should she calculate the MTBF?
The annual rate of occurrence multiplied by the expected useful lifetime of the device
The average number of failures per day divided by the number of days the company is open per year
The number of failures that have occurred in one year divided by 365
The total number of operational hours divided by the number of failures during that time period
IncorrectQuestion 81
0 / 1 pts
Jared wants to generate, store, and manage cryptographic keys on a mobile device for his organization What solution would be best suited to this purpose?
A mobile TPM
A microSD HSM
An embedded cryptoprocessor
○ A MDM

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Question 82	
1 / 1 pts	
As part of a penetration tes	t process, Michelle and Tony want to determine what wireless networks are
accessible in a multiblock a	area where a large hospital and affiliated offices operate. What technique
should they use to find as r	many wireless networks as possible as quickly as possible?
War chalking	
Vulnerability scanning	
Wi-sniping	
War driving	
••	
Question 83	
1 / 1 pts	
•	n testing and runs a tool that sends random and unexpected inputs to the
application to see how it res	sponds. What type of testing is she doing?
Unit testing	
Fuzzing	
 Static code analysis 	
Fagan testing	
••	
Question 84	
1 / 1 pts	
·	engineer and performs a full backup each Sunday evening and an incremental
, ,	iday evenings. One of the company's network servers crashed on Thursday
afternoon. How many back	ups will Mike need to do to restore the server?
Two	
Three	
Four	
O Five	
••	
Question 85	
1 / 1 pts	
· -	ll engineer his way into an organization and tells the staff member that he is
	esponsible for the company not getting a major contract if they do not assist
him. What social engineering	ng principle is he using?
Authority	
Intimidation	

Consensus

1 / 1 pts

When systems in Amanda's organization query the Domain Name System (DNS) server for domains related to malware and other suspect activities, the DNS server responds with incorrect information, pointing the systems to a harmless IP address. What type of security solution has Amanda's organization implemented?

A DNS round-robin

A DNS tarpit

A DNS sinkhole

None of the above

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Question 90	
1 / 1 pts What type of attack is it when the attack	okor attempts to get the victim's communication to abandon a high
quality/secure mode in favor of a lower	cker attempts to get the victim's communication to abandon a high- r-quality/less secure mode?
	-quality/icss secure mode:
Downgrade Downgrade	
Brute force	
Rainbow table	
Bluesnarfing ::	
Ougation 01	
Question 91 1 / 1 pts	
•	pplication, he discovers that some tests seem to behave differently
, ,	res two queries at the same time, it does not consistently provide
•	correct answer, and at other times the queries result in the wrong
response. What type of issue has Rick	•
A SQL injection flaw	
A fuzzer response	
A race condition	
A replay attack	
!	
Question 92	
1 / 1 pts	
Joanna's manager has told her that sh	e needs to prevent sideloading of applications to the
organization's mobile devices. What m	ethods should she focus on preventing?
Loading of files via USB	
 Loading of files via memory card 	
 Loading of files via wireless 	
All of the above	
#	
Question 93	
1 / 1 pts	
· · ·	entials include providing something they know and something they
	ork. Which of the following types of authentication is being
described?	
Token	
Multifactor	

Kerberos

1 / 1 pts

Which of the following is not a type of log that will be captured using journald, and thus made available via journalctl?

- initrd logs
- Kernel logs
- Web server logs
- Service logs

Question 99

1 / 1 pts

What common network security tool is the best equivalent to a security group in cloud service environments?

- A firewall
- An intrusion detection system (IDS)
- An intrusion prevention system (IPS)
- Security information and event management (SIEM)