

Cybersecurity Fundamentals for High School

Cybersecurity · Answer Key · 8 Questions

1. What type of malicious software encrypts a user's files and demands payment, typically cryptocurrency, to restore access?

- A) Spyware
- B) Adware
- C) Ransomware**
- D) Trojan horse

2. Which social engineering technique involves tricking individuals into revealing sensitive information, often through deceptive emails or fake websites that mimic legitimate ones?

- A) Denial-of-Service (DoS) attack
- B) Brute-force attack
- C) Phishing**
- D) SQL injection

3. What network security device monitors and filters incoming and outgoing network traffic based on an organization's previously established security policies?

- A) Router
- B) Switch
- C) Firewall**
- D) Modem

4. What is the process of converting information or data into a code to prevent unauthorized access, often using an algorithm and a key, making it unreadable without the correct key?

- A) Decryption
- B) Hashing
- C) Compression
- D) Encryption**

5. What security measure requires users to provide two or more verification factors, such as a password and a code from a mobile app, to gain access to an account or system?

- A) Single Sign-On (SSO)
- B) Biometric scanning
- C) Multi-factor Authentication (MFA)**
- D) Password manager

6. Which of the following is a primary consequence for individuals when their personal information, like names and addresses, is exposed in a large-scale data breach?

- A) Improved network speed
- B) Increased software compatibility
- C) Identity theft**
- D) Reduced hardware costs

7. Which characteristic best describes a strong password that is difficult for automated systems to guess?

- A) Short and easy to remember
- B) Uses only lowercase letters
- C) Contains a mix of uppercase and lowercase letters, numbers, and symbols**
- D) Is based on easily accessible personal information like birthdays

8. What technology creates a secure, encrypted connection over a less secure network, such as the internet, often used to protect online privacy and bypass geo-restrictions?

- A) Local Area Network (LAN)
- B) Wide Area Network (WAN)
- C) Virtual Private Network (VPN)**
- D) Storage Area Network (SAN)