

Elliptic Curves

Sample heading replace with your information.

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Seat 99 (Grade level 13)

Cyber Fundamentals

1. What does ECC stand for?
- A. External Computational Code
 - B. Entitled Cipher Club
 - C. Electronic Climate Center
 - D. Elliptic Curve Cryptography

Answer: _____

2. ECC uses numbers of what form?
- A. $y^2=x^3+ax+b$
 - B. $y=ax^2+bx+c$
 - C. $y=x^4+ax^2+b$
 - D. $y^2=x^3x$

Answer: _____

3. What are cryptographic protocols?
- A. Sets of rules designed for artificial intelligence to upgrade itself
 - B. Protocols for hiding or obscuring data within plain sight
 - C. Protocols for communicating between secret organizations
 - D. Procedures that encrypt data exchanged between a webserver and a user

Answer: _____

4. What does SSL stand for?
- A. Secret Society League
 - B. Severe Secure Lockets
 - C. Secure Sockets Layer
 - D. Stephanie Salazar Laughlin

Answer: _____

5. What does TLS stand for?
- A. Titillating Light Snack
 - B. Triple Layer of Security
 - C. Tri-Lateral Standard

D. Transport Layer Security

Answer: _____

6. What is the name of the key used for authentication during the establishment of an SSL/TLS session?

- A. PAP
- B. RSA
- C. NFC
- D. Q4L

Answer: _____

7. What does SPOF stand for?

- A. Single Point of Failure
- B. Scientific Process of Fragility
- C. Secure Protocol Obscuring Forgery
- D. Stop Putting Offensive Foolishness

Answer: _____

8. What is perfect forward secrecy?

- A. The reliance on the secrecy of the implementation of a system or components of a system to keep it secure
- B. Successful obscuring the redirection of messages in a method that can only be decrypted through hashing
- C. An encryption that automatically and frequently changes the key it uses to encrypt and decrypt information
- D. Discreetly passing on a message without any error

Answer: _____

9. What's the main purpose of perfect forward secrecy?

- A. To maintain a perfect response chain to emails perpetrating as hoaxes
- B. To hide in front of rather than behind when attempting to following an email chain
- C. If the key is compromised, only a small amount of data will be revealed
- D. None of the above

Answer: _____

10. What is secrecy through obscurity?

- A. The reliance on the secrecy of the implementation of a system or components of a system to keep it secure
- B. Successful obscuring the redirection of messages in a method that can only be decrypted through hashing
- C. An encryption that automatically and frequently changes the key it uses to encrypt and decrypt information
- D. Discreetly passing on a message without any error

Answer: _____

Elliptic Curves and Perfect Forward Secrecy

11. Secrecy through obscurity is extremely secure. It is not recommended to add additional layers of security because the encryption will take too long to be usable.

- A. True
- B. False

Answer: