

- If you have a machine that do  $2^{20}$  operation per second, and you are using a 40 bit key, how long will it take to break the key by brute force? Repeat for a 80 bit key? When each key is better to use?
- Worm and Virus lifecycle. Worm propagation lifecycle.
- IPSec services
- Message Authentication techniques
- SET diagram and scenario steps
- How to insure security and authentication using private and public key
- Tunnel Mode and Transport Mode functionality- ---> Table p.493
- What is SALT?
- Message authentication attacks
- Diffie Hellman steps. (also a problem on it)
- State Block Cipher modes of operation. Choose one and discuss it.
- Difference between Session and Connection.
- Problem on playfair
- Firewall configuration problem (given some IPs with description, which ones to allow or deny for some services?)