- 1. Authentication protocols?
 - a. classical: need trusted third party for both secrecy, authentication
 - b. public key: need to verify to whom public key belongs
- 2. Challenge-response
 - a. UNIX passwords
 - b. Kerberos
 - c. S/Key
 - d. Diffie-Hellman and Sun's Secure RPC
- 3. Public key
 - a. Standard: encipher with private key, decipher with public key
 - b. Binding public keys to identity: certificates
 - c. X.509, PGP web of trust
 - d. PEM hierarchy of certification