

Lecture 8: Security of RSA

THE MAGIC WORDS ARE
SQUEAMISH OSSIFRAGE.



Menu

- (Anonymous) Pop Quiz
- Security of RSA
 - Factoring
- Public Key Infrastructures

Properties of E and D

- Trap-door one way function:
 - ✓ $D(E(M)) = M$
 - ✓ E and D are easy to compute.
 - Revealing E doesn't reveal an easy way to compute D (next time)
- Trap-door one way permutation: also
 - ✓ $E(D(M)) = M$

Are there other functions that have properties 1, 2 and 4?