

CS 372 **Introduction to Computer Networks**
Self-Check Exercises: Lecture 42

- 1) What is message encryption? (High-level is OK)

- 2) How would encryption work with public key encryption?

- 3) Use the RSA algorithm discussed in lecture to develop a public key and a private key for public-key encryption. Let $p = 5$, $q = 11$, $e = 7$, m is the original message, c is the encrypted message.
 - a. $n =$

 - b. $z =$

 - c. $d =$

 - d. $c = \text{Kpublic}(m) =$

 - e. $\text{Kprivate}(c) =$

 - f. $\text{Kprivate}(\text{Kpublic}(m)) =$

- 4) How might authentication work with public key encryption? (Textbook will be helpful here)