

**Problem Set 2 (due October 11, 2004)**

Submit electronically to [ati@ccs.neu.edu](mailto:ati@ccs.neu.edu) and CC me.

**Problem 1:**

1. Describe an encryption scheme that you might have used as a kid to communicate securely, and that you thought is fairly secure. If you never did, then imagine a scheme or discuss with your little cousin ☺
2. Discuss the deficiencies of that scheme and how it might be broken.

**Problem 2:**

**Textbook page 70, exercise 2.1.**

**Problem 3:**

**Textbook page 71, exercise 2.11.**

Interpret that result.

**Problem 4:**

**Textbook page 71, exercise 2.16.**

**Problem 5:**

Implement the SPN encryption algorithm of example 3.1, page 76.

**The following problems are only for graduate students only.**

**Problem 6:**

**Textbook page 70, exercise 2.4.**

**The following problems is only for PhD students only.**

**Problem 7:**

**Textbook page 72, exercise 2.20.**