Columbia University
W4995: Introduction To Cryptography, Fall 2003
Instructor: Professor Malkin
Lecture 0, Notes takes by Ariel Elbaz

Abstract

This document gives a few examples for using LaTeX. You should use the given file (`ITC0.tex`) as a template for writing your scribes - change the name to have the correct lecture number that you're scribing, such as `ITC7.tex` if you're scribing lecture 7.

1   Examples of Theorems, Claims, Lemmas, and Proofs

Theorem 1 *text of a theorem...*

Proof   starting a proof... and ending it   ■

Claim   *text of a claim*
Sketch of Proof (Informal)   text of a proof sketch   ■

We can also *emphasize parts of the text*

1.1   A subsection on primes

Definition 1 p is a prime if p is an integer that has no integral factors but itself and 1.   ■

More examples

Lemma 1 *text of a lemma*

Example 1 *text of an example*

2   Mathematical Equations

Math equations can either be mixed with text,, such as $y = x + 2$ or $2^{2^{13}}$ or $\frac{17!}{2^{34}}$, or else they can be in a sepeate line

$$Pr[x \geq y] \leq \frac{1}{3}$$

or on an automatically numbered equation

$$\forall x | x \leq y \Rightarrow y \geq 0 \qquad (1)$$

and the text continues in the next line.

More advanced equations

$$V_{s,0}^{\{q_0,q_1\}} = V_{s,0}^{\{q_0\}} \cup \quad V_{s,1}^{\{q_0\}} \circ \left(V_{1,1}^{\{q_0\}}\right)^* \circ V_{1,0}^{\{q_0\}}$$

$$V_{s,2}^{\{q_0,q_1\}} = V_{s,2}^{\{q_0\}} \cup \quad V_{s,1}^{\{q_0\}} \circ \left(V_{1,1}^{\{q_0\}}\right)^* \circ V_{1,2}^{\{q_0\}} = V_{s,1}^{\{q_0\}} \circ \left(V_{1,1}^{\{q_0\}}\right)^* \circ V_{1,2}^{\{q_0\}}$$

3 Itemizing

- first item
- second item

*** item with my bullet

■ any bullet will go

  1. Items can also be numbered
  2. and they can be nested

4 Writing text

The LaTeXcompiler does it's own pagesetting. It converts any number of spaces to a single space, and concatantes sentences to fill the paragraph. You can spread one sentence over as many lines as you want, it will continue as if it was written in a single line. If you want to break a paragraph you need to leave an empty line.